DOCUMENT RESUME

ED 368 222 FL 800 746

AUTHOR	Spener, David, Ed.
TITLE	Adult Biliteracy in the United States. Language in Education: Theory and Practice 83.
INSTITUTION	Adjunct ERIC Clearinghouse for ESL Literacy Education, Washington, DC.; Center for Applied Linguistics, Washington, D.C.; Delta Systems Inc., McHenry, IL.; National Clearinghouse on Literacy Education, Washington, DC.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO	ISBN-0-937354-83-X
PUB DATE	94
CONTRACT	RI89166001
NOTE	245p.
AVAILABLE FROM	Delta Systems, Inc., 1400 Miller Pkwy., McHenry, IL 60050-7030 ($19.95).
PUB TYPE	Information Analyses - ERIC Clearinghouse Products (071) -- Collected Works - General (020)
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Adolescents; *Adult Literacy; *Bilingualism; Black Dialects; Cognitive Processes; Educational Technology; *English (Second Language); Ethnography; Family Environment; High School Equivalency Programs; Hispanic Americans; Instructional Effectiveness; Language Planning; Literacy Education; Sciences; Second Language Learning
IDENTIFIERS	*Biliteracy; *United States

ABSTRACT

This collection of articles by 15 leading researchers and teachers explores the social, cognitive, and pedagogical aspects of developing biliteracy--literacy in two languages. Chapters include the following: "Inheriting Sins While Seeking Absolution: Language Diversity and National Data Sets" (Reynaldo Macias); "Sociolinguistic Considerations in Biliteracy Planning" (Arnulfo G. Ramirez); "Bidialectal Literacy in the United States" (Walt Wolfram); "Biliteracy in the Home: Practices Among Mexicano Families in Chicago" (Marcia Farr); "Literacy and Second Language Learners: A Family Agenda" (Gail Weinstein-Shr); "?Guariyusei? Adult Biliteracy in Its Natural Habitat" (Tomas Mario Kalmar); "Literacy as Practice and Cognitive Skill: Biliteracy in an ESL Class and a GED Program" (Nancy H. Hornberger, Joel Hardman); "Putting a Human Face on Technology: Bilingual Literacy Through Long-Distance Partnerships" (Dennis Sayers, Kristin Brown); "Discourse and Social Practice: Learning Science in Language Minority Classrooms" (Beth Warren, Ann S. Rosebery, Faith Conant); and "Engaging Students in Learning: Literacy, Language, and Knowledge Production with Latino Adolescents" (Catherine E. Walsh). (Adjunct ERIC Clearinghouse on Literacy Education) (VWL)

ED 368 222

ADULT BILITERACY IN THE UNITED STATES

EDITED BY
DAVID SPENER

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

ERIC 2CAL

Adult Biliteracy in the United States

FL 800 746

Adult Biliteracy in the United States

David Spener, Editor

A co-publication of
the Center for Applied Linguistics and Delta Systems Co., Inc.
prepared by the National Clearinghouse on Literacy Education,
an adjunct ERIC Clearinghouse

Language in Education
Theory & Practice

ERIC
CAL

EL 800 746

CAL ©1994 by the Center for Applied Linguistics
and by Delta Systems Co., Inc.
All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher. All inquiries should be addressed to Delta Systems Co., Inc. 1400 Miller Parkway, McHenry, IL 60050-7030.

Printed in the United States of America
10 9 8 7 6 5 4 3 2 1

Language in Education: Theory and Practice 83
Editorial/production supervision: Joy Peyton and Fran Keenan
Editorial assistance: Amy Fitch
Cover design and production: Julie Booth

ISBN 0-937354-83-X

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract No. RI 89166001. The opinions expressed in this report do not necessarily reflect the positions or policies of OERI or ED.

Library of Congress Cataloging-in-Publication Data

Adult biliteracy in the United States / David Spener, editor.
p. cm.
"A publication of the Center for Applied Linguistics prepared by the National Clearinghouse on Literacy Education."
Papers presented at a conference entitled Biliteracy—theory and practice held Jan. 1991, Washington, DC.
Includes bibliographic references.
ISBN 0-937354-83-X : $19.95
1. Language planning—United States—Congresses. 2. Bilingualism—United States—Congresses. 3. United States—Languages—Congresses. 4. Literacy—United States—Congresses. I. Spener, David, date. II. Center for Applied Linguistics. III. National Clearinghouse on Literacy Education. IV. Title: Biliteracy—theory and practice.
P40.5.L352U613 1994
306.4'46'0973—dc20 93-45622

CONTENTS

INTRODUCTION 1
David Spener

CHAPTER 1
Inheriting Sins While Seeking Absolution: Language Diversity and National Data Sets 15
Reynaldo F. Macías

CHAPTER 2
Sociolinguistic Considerations in Biliteracy Planning 47
Arnulfo G. Ramírez

CHAPTER 3
Bidialectal Literacy in the United States 71
Walt Wolfram

CHAPTER 4
Biliteracy in the Home: Practices Among *Mexicano* Families in Chicago 89
Marcia Farr

CHAPTER 5
Literacy and Second Language Learners: A Family Agenda 111
Gail Weinstein-Shr

CHAPTER 6
***¿Guariyusei?* Adult Biliteracy in Its Natural Habitat** 123
Tomás Mario Kalmar

FL 800 746

CHAPTER 7
Literacy as Cultural Practice and Cognitive Skill: Biliteracy in an ESL Class and a GED Program 147
Nancy H. Hornberger & Joel Hardman

CHAPTER 8
Putting a Human Face on Technology: Bilingual Literacy Through Long-Distance Partnerships 171
Dennis Sayers & Kristin Brown

CHAPTER 9
Discourse and Social Practice: Learning Science in Language Minority Classrooms 191
Beth Warren, Ann S. Rosebery, & Faith Conant

CHAPTER 10
Engaging Students in Learning: Literacy, Language, and Knowledge Production with Latino Adolescents 211
Catherine E. Walsh

ACKNOWLEDGMENTS

In addition to the authors of individual chapters in this volume, I owe thanks to a number of people whose contributions to its successful completion were crucial. First, I would like to thank G. Richard Tucker and JoAnn Crandall, former CAL president and vice president, respectively, for their support and encouragement for putting together a book on the critical issue of adult biliteracy in the United States. Second, Jeannie Rennie, Fran Keenan, and Amy Fitch of the National Clearinghouse on Literacy Education performed the laborious tasks of copyediting and overseeing the layout and made sure that the errors missed by this editor did not make their way into the final text. Finally, I would like to express special thanks to Joy Peyton, NCLE Publications Coordinator. Without her diligence in shepherding this book through the editorial process, from beginning to end, it would not be in your hands today.

INTRODUCTION

David Spener
University of Texas at Austin

One of the primary purposes of this introduction is to give readers a sense of the contents of this book by more clearly defining and establishing parameters for the topic contained in its title, ***Adult Biliteracy in the United States***. Another purpose is to provide a sociopolitical framework within which to place the discussions contained in individual chapters. A third purpose is to introduce readers to issues that individual authors discuss. In attempting to accomplish the first two purposes, I have simplified some important issues in the interest of presenting a clear and readily comprehensible overview for the book. It must be noted, however, that adult biliteracy in this country is a complex matter, and any attempt to simplify important issues leads inevitably to distortions in the picture one develops. I hope that any perceived distortions in this summary will be cleared up as one reads subsequent chapters in this volume.

Defining the Parameters of Adult Biliteracy in the United States

Put in the simplest way possible, the term ***biliteracy*** refers to reading and writing in two languages. Because two languages are involved, biliteracy is inseparably linked to the term ***bilingualism***, which ***The American Heritage Dictionary of the English Language*** defines as "habitual use of two languages, especially in speaking" (Morris, 1973). With regard to modern, living languages (as opposed to certain classical languages such as Latin), it is typically the case that reading and writing a given language presupposes some proficiency in speaking it and understanding it when it is spoken. As a result, it is practically impossible to discuss the phenomenon of bi***literacy*** in a sensible way without at the same time discussing bi***lingualism*** and the many issues surrounding oral language use that bilingualism implies. With regard to how the term biliteracy is used in this book, we can go further and say that what is implied by

the term bilingualism is contained within the term biliteracy. In other words, biliteracy is bilingualism *plus* reading and writing in both languages.

Biliteracy may be discussed with reference to individuals, communities and their institutions, or educational approaches. It can refer to the abilities of individual people to speak, read, and write in two different languages. It can also be used to refer to communities (from villages to nations to multinational or global communities) where materials are read and written in two different languages, whether or not many individuals in those communities are themselves biliterate. With regard to educational approaches, biliteracy can be used to describe attempts to develop literacy in two different languages either simultaneously or sequentially. All three of these aspects of biliteracy are discussed in this volume, though not necessarily by each author in each chapter.

A book on adult biliteracy in the United States could potentially deal with virtually any adult or group of adults who read and write any two languages in any setting in the country, no matter how small the group or how limited the use of the languages. As is often the case, however, both more and less are meant by the term biliteracy than immediately comes to mind. This book does not, for example, address itself to biliteracy among native English speakers. Instead, the biliteracy discussed in this book refers to second language literacy[1] in English *plus* literacy in the mother tongue of one of the many ethnolinguistic minority groups residing in the United States. While it may be true that biliteracy has considerable potential value to native speakers of English in the United States, these native English speakers are not often particularly disadvantaged by being literate only in English. Adult members of linguistic minorities, on the other hand, frequently are substantially disadvantaged in U.S. society if they are not literate in English, even if they are literate in their mother tongue. The chapters in this book are all, to varying degrees, written with this fact as the backdrop and generally portray biliteracy as at least part of a remedy to this disadvantage. At the same time, the book not only discusses language issues related to biliteracy, but also considers those issues within the broader contexts in which they occur.

A Sociopolitical Framework for Biliteracy

A combination of demographic, economic, linguistic, and educational factors have led to increased interest in adult biliteracy in the United States and have presented many challenges for policy makers and educators.

Demographic diversity: A fact of life in the United States

The United States today is a multiracial, multicultural, and multilingual nation. It has been so since its inception and will continue to be so for the foreseeable future. Though English is thoroughly established as the language of commerce, government, and cross-cultural communication, it has always interfaced with a plethora of other languages spoken, read, and written both by newcomers and by the peoples who occupied the North American continent since before Anglo settlers arrived. Massive immigration to the United States has been a constant of 20th-century life in spite of various legislative attempts to curtail or control it, and 1990 census data indicate that this phenomenon has greatly intensified as the country prepares to enter the 21st century (see Macías, this volume). Racial, cultural, and linguistic diversification of the U.S. population is fast on the rise. While the preeminence of English inside the country is most assuredly not threatened in any immediate way by this process, the question of oral and written communication among residents of the United States becomes more problematic.

The competitive stance of the United States in the world economy: Adult literacy in the context of new concerns about the workforce

Also more problematic in recent years has been the world economic standing of the United States. As a truly global economy has evolved since the end of World War II, the United States has faced increasing competition from rival industrialized nations in Europe and Asia, and the ability of U.S. firms to dominate trade in many markets has flagged. While this relative economic decline of the United States in the world economy can be attributed to a variety of causes, business and government leaders have pointed to one cause in particular that concerns us here: the relatively low literacy levels of large numbers of workers and potential workers in the national economy. (See, e.g., Johnston & Packer, 1987; Mississippi Literacy Foundation, 1989.) These leaders believe that it will be necessary to raise the literacy levels of millions of adult and young adult workers

if U.S. firms are to reach the higher levels of productivity and efficiency made possible by new technologies and made necessary by foreign competition. President Bush made the advancement of adult literacy one of the cornerstones of his education policy, and the educational establishment began working during his administration to make the achievement of this goal possible.

Literacy education and the linguistic diversity of the workforce

The literacy picture, however, is complicated by the demographic factors discussed above, particularly by the increasing linguistic diversity of the United States' population. A substantial percentage of those adults identified by the U.S. Departments of Education and Labor as being insufficiently literate to function effectively with government and business institutions are not fully proficient speakers of English. Since literacy in a modern language typically requires some degree of spoken proficiency, educational programs designed to promote literacy and basic skills in English must either (a) assume that learners already possess a minimum threshold of spoken proficiency in English or (b) promote the acquisition of spoken English and its communicative functions. Clearly, English as a second language (ESL) classes will play a major role in advancing the literacy of a growing number of immigrant adults and youth in the U.S. labor force.

If providing ESL classes were a sufficient answer to the question, "How can educators best advance literacy among language minority adults and their families?", the title of this book would probably be *ESL in the United States*, instead of *Biliteracy in the United States*. More and more literacy researchers and educators, however, are finding that the answer is not quite that simple. For one thing, while it is known that many nonnative English speakers seem not to be functionally literate in English, it is not known how literate they are in other languages. Typical ESL classes assume limited spoken proficiency in English; they also typically assume some minimum ability to use reading and writing skills to learn English in a classroom situation, even when the emphasis of instruction is on the acquisition of oral language. In other words, to take full advantage of ESL instruction, adult learners must already be literate to some extent in their native language. What, then, is to be done about the student enrolling in an ESL class who does not meet this minimum requirement? A few years prior to President Bush's announcement of his

adult literacy goals, implementation of the educational provisions of the 1986 Immigration Reform and Control Act (IRCA) brought this question into sharp relief for adult ESL educators nationwide.

IRCA offered undocumented immigrants and refugees who had resided in the United States continuously since before January 1, 1982, the opportunity to become legal permanent residents of the United States through participation in what came to be known as the amnesty program. With some specific exceptions (see Terdy & Spener, 1990), legal permanent residence status would be awarded only to those previously undocumented persons who demonstrated either (a) the ability to speak and write English and a knowledge of U.S. history and civics (as measured by a test) or (b) *progress* toward acquiring that ability and knowledge. Satisfactory progress came to be defined as completion of 40 hours of a 60-hour course of instruction in ESL and U.S. history and civics that had been certified by the Immigration and Naturalization Service. Hundreds of thousands of students enrolled in these amnesty classes all over the United States, the majority having never previously enrolled in adult ESL classes.

In many cities, adult basic education systems suddenly found themselves swamped with a new student population they were not adequately prepared to serve. Not only were they faced with the daunting tasks of establishing administrative procedures, developing curricula, and recruiting qualified teachers in a short amount of time, they were also faced with the new challenge of how best to transmit specific content knowledge about the United States to students who did not speak, read, write, or understand English. This was the first time that adult education systems were required to teach specific subject area content to limited-English-proficient adults on a massive scale. One obvious option was to design courses that were bilingual in nature, with ESL instruction offered in conjunction with content area instruction in the students' native language. Here, however, the question of literate ability in the adult students' native language came into play.

In the state of California, for example, where 1.6 million potential participants in the amnesty program resided (by far the largest number of any state), an assessment of the English ability and educational background of 265,000 amnesty students was conducted at the time of their initial enrollment in amnesty classes.[2] The assessment found, among other things, that 85% of those students assessed

in English would have difficulty in "reading basic warning or safety signs or filling out a simple job application," and that the median level of formal education completed in the native language in the country of origin was only 6.5 years (Comprehensive Adult Student Assessment System, 1990). The number of years of formal education completed is only an indirect measure of literate ability, yet this finding came as no surprise to many educators in amnesty programs who had already learned from difficult experience that large numbers of students in their amnesty classes had extremely limited literacy skills in their native language as well as in English. Thus, the bilingual solution was turning out to be inadequate as well, since the formal learning of subject area content was also dependent to a large extent on students already having a minimum threshold of reading and writing skills in their native language. More and more adult ESL teachers and administrators were coming to believe that the extent to which students were literate in their native language played a large role in determining their educational future in the United States.

Regardless of its quality, 60 hours of instruction—the maximum number of hours for the above-described amnesty classes—is an impossibly short amount of time to achieve significant gains in spoken English proficiency, much less in English literacy; neither does it allow for any but the most superficial treatment of the history and government of the United States. The importance of the instructional approach and language of instruction used in these classes should therefore not be exaggerated. The long-term importance of instructional approach and medium of instruction became evident later, as many "amnestied" students continued to enroll in adult education courses even after they had fulfilled the educational requirements IRCA had imposed for obtaining legal permanent residence. Administrators of adult education programs began to find that their amnesty students wished to continue their education both in ESL classes and through other kinds of training, such as vocational education and computer classes. How to make instruction in these classes accessible to immigrant students with low levels of both spoken English proficiency and literacy in their native language continued to preoccupy adult educators in many locales.

In fairness to the ESL profession, it must be noted that methods and materials have been developed for combining the teaching of initial literacy and oral language in ESL classrooms without depend-

ing on literacy ability in the native language or on use of the native language in class (see, e.g., Bell & Burnaby, 1984; Haverson & Haynes, 1982). Methods and materials have also been developed for K-12 instruction that promote the acquisition of spoken and written English by limited-English-proficient pupils through instruction in specific content areas such as math, science, and social studies (see, for example, Mohan, 1986; Crandall, 1987). It would thus be inaccurate to state that using students' native language to teach initial literacy and specific subject content was or is the only option available to adult educators.

It must also be said, however, that although ESL literacy and content-area methods and materials do exist, there does not exist sufficient research evidence to suggest that these methods and materials are superior to some combination of ESL and native language instruction. Research evidence with both school children and adults does suggest, however, that the stronger the language and literacy abilities of learners in their native language, the more likely it is that they will develop similarly strong language and literacy abilities in English (Burtoff, 1985; Collier, 1989; Cummins, 1981, 1984; Robson, 1982). It is this evidence that has led a growing number of literacy practitioners and researchers to look at ways of promoting literacy in the native language (or, to use an alternate term, the mother tongue) of language minority adults living in the United States. (For a synopsis of trends in native language literacy for adults, see Rivera, 1990.)

If an individual who is literate in his or her mother tongue is more likely to become a proficient speaker, reader, and writer of English than one who is illiterate in the mother tongue, and if in turn such proficiency and literacy in the English language increases that individual's potential to be a skilled and productive worker in the U.S. economy, then a rationale for biliteracy as both an educational goal and an instructional approach for language minority adults can be conscientiously made. We must speak of biliteracy even if learning to read and write in the native language is thought to serve no other purpose than to promote the subsequent goal of acquiring English literacy. One presumably does not cease to be literate in one's native language upon becoming literate in English—one arrives at a state of biliteracy; that is, being simultaneously, though not necessarily equally, literate in two languages.

Biliteracy education, job training, and promoting the social mobility of language minority adults

There is a growing realization in adult education that language minority adults have educational needs and interests that go beyond the acquisition of spoken and written English (see, e.g., Kalmar, 1992). Bilingual education programs were put in place for non-English-speaking children in the public schools so that they could be taught other subjects, such as math, in their native language while they were learning English. Why not do the same for adults who, as things now stand in many cities across the country, must postpone their participation in job training programs until that "someday" when their English literacy and spoken proficiency have developed sufficiently to allow them to benefit from training provided only in English?

Despite their high levels of motivation to learn English, that someday never comes for many language minority adults. Spoken proficiency and literacy in a second language take many years to develop even under ideal conditions; for many immigrant adults, the conditions are far from ideal and may tend toward the inadequate. In addition to the difficulty of finding time to study English each day after family and work responsibilities are taken care of, both immigrants and U.S.-born limited English speakers too often find themselves working low-skill, low-wage jobs where they either work primarily alongside other immigrants (with whom they interact in their shared native language or in their limited English) or at jobs where they are required to engage in only limited verbal communication with anyone. The potential for them to acquire English informally through interaction with native English speakers is thus limited as well. Denying access to job-related training by making it available only to literate, proficient English speakers (native or not) only compounds the problem of lack of contact with English by making it more difficult for language minority adults to break into higher skilled jobs where they are more likely to interact with native English speakers. It also runs counter to the stated goals of U.S. government and business leaders to improve the competitiveness of U.S. firms in the world market by increasing the skill levels of the nation's workers.

The economic value of fluency and literacy in non-English languages

In describing how it has come to be that biliteracy has gained some currency at the level of setting educational policy, I have

focused on the economic value to U.S. society of a skilled, English-literate workforce, and how educational programs for language minorities have attempted to contribute to that value. This focus ignores the practical value of native language literacy in and of itself, not just as a bridge to English. In the United States, many language minority communities in numerous cities and regions are sufficiently large that governmental, commercial, and cultural activities involving literacy are conducted in non-English languages; so to some extent, at least, literacy in those languages constitutes a marketable commodity within those communities. In addition, as economic production becomes increasingly globalized, we should witness a growing demand for U.S. workers who are literate in the languages of countries with which the United States trades or in which U.S. companies produce goods. The value in the world economy of being fluent and literate in a language other than English cannot be denied. In fact, its value has not historically been denied in the United States if the individual possessing that ability is a native speaker of English. Perhaps the time has come for native speakers of other languages to have the value of their non-English language abilities recognized.

Non-economic aspects of literacy

The economically focused picture I have painted above presents literacy as highly functional for overall society, but ignores questions of the many non-economic purposes to which individuals and specific groups within society might wish to put literacy. It also fails to take into account how literacy learners might participate in setting their own agendas for becoming more literate, including deciding what kinds of educational programs involving which languages could best serve their interests (which may in fact conflict at times with the interests of the business, government, and educational establishments). A number of authors in this volume (e.g., Walsh and Weinstein-Shr) address these non-economic issues.

Moreover, the picture I have presented glosses over some key aspects of the nature of literacy itself. From the way I have used the term throughout this introduction, it might be assumed that (a) being literate is a plus or minus condition for any given individual; (b) literacy is a single set of reading and writing skills, acquired through schooling, that may be used equally well in a multitude of unrelated situations; and (c) literacy is generally comparable from

language to language, so that it means the same thing to be literate in Spanish, Arabic, or English. These assumptions, in the view of many researchers today, are gross distortions of the nature of literacy in human society. Literacy (and, by extension, biliteracy) is now recognized as a complex continuum of skills and abilities acquired and practiced in a variety of sociolinguistic contexts (not just school contexts), involving a number of distinct types of texts tied to these contexts (see, e.g., Heath, 1983; Hornberger, 1989; Kirsch, 1990; Street, 1984). The authors of the remaining chapters in this book dedicate themselves to the challenge of investigating and illuminating this complexity. It is hoped that the knowledge and experiences they share will inform policies affecting the education of language minority adults in such a way that these policies will be consonant with the real-life experiences and aspirations of language minority adults and their families.

Chapters in This Book

The essays in this volume constitute the proceedings of a two-day research symposium—*Biliteracy: Theory and Practice*—convened in Washington, DC in January 1991 by the National Clearinghouse on Literacy Education and made possible by a grant from the William and Flora Hewlett Foundation. The authors approach the theme of adult biliteracy from a variety of theoretical, research, and practice-based perspectives. It is hoped that readers of this volume will include theorists, researchers, and practitioners, as well as others with a more general interest in the topic. While most of the chapters limit their discussions to biliteracy as it relates to adults, some chapters describe learning situations involving adolescents and school-age children. Authors of these chapters were invited to contribute to this volume based on the belief that the situations they describe have strong implications for the education of language minority adults as well.

Chapters 1, 2, and 3 address primarily the question of linguistic diversity in the United States and its implications for the education of language minority adults. In Chapter 1, Reynaldo Macías of the University of California, Santa Barbara discusses the history of collecting data on language diversity and literacy in this country, including a description of the design and methods of the most current effort at data collection, the National Adult Literacy Survey, con-

ducted by the National Center on Education Statistics. In Chapter 2, Arnulfo Ramírez of Louisiana State University examines biliteracy from a language-planning perspective and emphasizes the importance of biliteracy planners taking into account such sociolinguistic factors as language variety, language style and register, language attitudes, and language choice. Walt Wolfram of North Carolina State University, in Chapter 3, discusses *bidialectalism* in the United States, examining the case of Standard and Black Vernacular Englishes and the teaching of reading to African-American children in the public schools.

In Chapters 4 and 5, Marcia Farr of the University of Illinois-Chicago and Gail Weinstein-Shr of San Francisco State University, respectively, discuss biliteracy with regard to the cultural practices and life concerns of language minority immigrant families. Farr places her description of the family literacy practices of a Mexican social network in Chicago within a theoretical framework defining literacy. Weinstein-Shr presents her recommendations for a research and practice agenda for family literacy as she shares vignettes from the experiences of people involved in Project LEIF, an educational project serving Philadelphia's Southeast Asian refugee community.

The remaining chapters focus, to greater or lesser extents, on the experiences of different groups of people learning literacy in differing contexts. Chapter 6, by Tomás Mario Kalmar of Lesley College in Cambridge, MA, relates the work of 19th-century British philologist Henry Sweet and a 9th-century medieval glossary to both the nascent biliteracy of 20th-century Mexican migrant workers in the orchards of southern Illinois and the role that Christian missionaries played in a post-revolutionary biliteracy campaign in the Tarascan region of Mexico's Michoacán state in the 1930s. Not incidentally, the Mexican migrant workers discussed in this chapter were largely ethnic Tarascans from Michoacán who were in the process of writing their own biliterate glossaries.

In Chapter 7, Nancy Hornberger and Joel Hardman of the University of Pennsylvania present elements of their ethnographic research on the instructional practices followed in a Cambodian ESL class and a Puerto Rican GED program. They analyze their findings with respect to Hornberger's theoretical model for examining the various dimensions of biliteracy (Hornberger, 1989) and with respect to two competing models characterizing the nature of literacy: the autonomous and ideological models (Street, 1984).

Chapter 8 describes Project *Orillas*, a project linking geographically dispersed classes of language minority schoolchildren and their parents through the use of satellite computer networking technology. Authors Dennis Sayers of New York University and Kristin Brown of University of San Francisco describe the effectiveness of the approach in terms of increasing parental involvement in their children's schooling, improving the self-esteem of members of language minority families, changing language attitudes, and engaging both parents and children in meaningful writing activities in two languages.

The authors of Chapter 9, Beth Warren, Ann Rosebery, and Faith Conant of the Technical Education Research Center in Boston, see the process of becoming literate as the successive appropriation of different thematic discourses, irrespective of the language in which these discourses take place. In this chapter they describe the experiences of a group of language minority students in a high school basic skills class as they struggle to master scientific discourse, that is, learning to think about and explore the world as professional scientists do.

In the final chapter, Catherine Walsh of the University of Massachusetts–Boston examines her own beliefs about literacy with regard to her work with Latino high school students labeled "at risk" of dropping out by their Boston-area school. Her account describes the efforts of these students to come to grips with their own identity and to express themselves as they collectively write a "photonovel" based on their school experiences. In concluding, she points to the importance of critical pedagogy for making evident, to teacher and student alike, "the complex significance of language and literacy, and the conditions, relationships, and practices that surround their use and development."

Notes

[1] Throughout this volume, we use terms such as "English as a second language learners," "Second language literacy," and so on, recognizing that for some speakers English may be a second, third, or fourth language.

[2] According to the Comprehensive Adult Student Assessment System (CASAS), these 265,000 students were "predominantly Hispanic (98%) and between the ages of 25 and 44 (70%). . . . Men and

women were represented almost equally (51% and 49%). . . . Most students were from Mexico (85%) and spoke Spanish as their native language (98%)" (CASAS, 1990, p. 2).

References

Bell, J., & Burnaby, B. (1984). *A handbook for ESL literacy.* Toronto, Ontario: OISE Press.

Burtoff, M. (1985). *Haitian Creole literacy evaluation study: Final report.* Washington, DC: Center for Applied Linguistics. (ERIC Document Reproduction Service No. 277 273)

Collier, V.P. (1989). How long? A synthesis of research on academic achievement in a second language. *TESOL Quarterly, 23,* 509-531.

Comprehensive Adult Student Assessment System (CASAS). (1990). *Amnesty education report: IRCA preenrollment appraisal results.* San Diego: Author. (ERIC Document Reproduction Service No. 321 605)

Crandall, J. (Ed.). (1987). *ESL through content-area instruction: Mathematics, science, social studies.* Englewood Cliffs, NJ and Washington, DC: Prentice Hall and Center for Applied Linguistics.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *Schooling and language minority students: A theoretical framework* (pp. 3-50). Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center.

Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy.* San Diego: College Hill.

Haverson, W.W., & Haynes, J.L. (1982). *ESL/literacy for adult learners.* Washington, DC: Center for Applied Linguistics.

Heath, S.B. (1983). *Ways with words: Language, life and work in communities and classrooms.* Cambridge: Cambridge University Press.

Hornberger, N. (1989). Continua of biliteracy. *Review of Educational Research, 59*(3), 271-296.

Johnston, W.B., & Packer, A.H. (1987). *Workforce 2000: Work and workers for the 21st century.* Indianapolis, IN: Hudson Institute.

Kalmar, T. (1992). Drawing the line on minority languages: Equity and linguistic diversity in the Boston Adult Literacy Initiative. *Journal of Adult Basic Education*, *2*(2), 84-112.

Kirsch, I. (1990). Measuring adult literacy. In R. Venezky, D. Wagner, & B. Ciliberti (Eds.), *Towards defining literacy* (pp. 40-47). Newark, DE: International Reading Association.

Mississippi Literacy Foundation. (1989). *State literacy strategies: A policy primer.* Jackson, MS: Author.

Mohan, B.A. (1986). *Language and content.* Reading, MA: Addison-Wesley.

Morris, W. (Ed.). (1973). *The American Heritage dictionary of the English language.* New York: American Heritage.

Rivera, K. (1990). *Developing native language literacy in language minority adults. ERIC Digest.* Washington, DC: Center for Applied Linguistics, National Clearinghouse on Literacy Education. (ERIC Document Reproduction Service No. ED 358 747)

Robson, B. (1982). *Hmong literacy, formal education, and their effects on performance in an ESL class.* In B.T. Downing & P.O. Dougleas (Eds.), *The Hmong in the West—Observations and reports: Papers of the 1981 Homg Research Conference, University of Minnesota* (pp. 201-225). Minneapolis, MN: University of Minnesota, Center for Urban and Regional Affairs. (ERIC Document Reproduction Service No. ED 299 829)

Street, B. (1984). *Literacy in theory and practice.* New York: Cambridge University Press.

Terdy, D., & Spener, D. (1990). *English language literacy and other requirements of the Amnesty Program. ERIC Q&A.* Washington, DC: Center for Applied Linguistics, National Clearinghouse on Literacy Education. (ERIC Document Reproduction Service No. 321 616)

CHAPTER 1

Inheriting Sins While Seeking Absolution: Language Diversity and National Statistical Data Sets

Reynaldo F. Macías
University of California, Santa Barbara

Understanding the literacy of the U.S. population has been a struggle for researchers, educators, and policymakers for most of the 20th century. Despite several national surveys over the last 20 years, our knowledge is skimpy at best and limited to English literacy. Complicating the literacy situation is the increased linguistic diversity of the nation.

Measuring Literacy in a Linguistically Diverse Population

In 1980, there were 28 million people age 5 years and older who lived in households where a non-English language (NEL) was spoken. About 23 million of them actually spoke a non-English language themselves, and about half of these people spoke Spanish (see Table 1). In the subsequent 10 years, the Hispanic and Asian population (with large numbers of speakers of non-English languages) increased by much greater percentages than the general population: 53% and 108% respectively, compared to 10% for the general population (see Table 2). The number of people age 5 years and older who spoke languages other than English increased 38.6% from 22,973,410 to 31,844,979, between 1980 and 1990 (see Tables 1 and 3). The total population 5 years and older increased 9.6% during that time. The number of Spanish speakers 5 years and older increased 56%, from 11,117,606 to 17,345,064 (see Table 4). Over four fifths of this growth was in the adult, not the school-age population.

I would like to thank several people for providing helpful comments on an earlier draft of this essay: David Spener, Douglas Rhodes, Irwin Kirsch, Ann Jungeblut, and Hannah Fingeret.

Table 1
Bilingual Abilities of Selected Language Groups by Age, for the U.S., 1980

	Total NEL Speakers		Bilinguals		NEL Monolinguals	
	N	%(Col/Row)	N	%(Col/Row)	N	%(Col/Row)
5-17 yrs						
All non-English Languages	4,529,098	100.0% 100.0%	3,875,536	100.0% 85.6%	653,562	100.0% 14.4%
Spanish	2,947,051	65.1% 100.0%	2,474,619	63.9% 84.0%	427,432	72.3% 16.0%
Other NEL	1,582,047	34.9% 100.0%	1,400,917	36.1% 88.6%	181,130	27.7% 11.4%
18+ yrs						
All NEL	18,444,312	100.0% 100.0%	14,801,370	100.0% 80.2%	3,642,942	100.0% 19.8%
Spanish	8,170,555	44.3% 100.0%	5,879,301	39.7% 72.0%	2,291,254	62.9% 28.0%
Other NEL	10,273,757	55.7% 100.0%	8,922,069	60.3% 86.8%	1,351,688	37.1% 13.2%
5+ yrs						
All NEL	22,973,410	100.0% 100.0%	18,676,906	100.0% 81.3%	4,296,504	100.0% 18.7%
Spanish	11,117,606	48.4% 100.0%	8,353,920	44.7% 75.1%	2,763,686	64.3% 24.9%
Other NEL	11,855,804	51.6% 100.0%	10,322,986	55.3% 87.1%	1,532,818	35.7% 12.9%

Source: Data are from U.S. Bureau of the Census, (1982, March), Provisional social and economic estimates from the 1980 Census. (PHC-80-S1). Washington, DC: USGPO. Table P-2.

Note: Bilinguals were constructed by taking those who "speak a language other than English at home" and also "speak English well or very well." Non-English monolinguals were constructed by taking those who "speak a language other than English at home" and also "speak English not well or not at all."

BEST COPY AVAILABLE

Table 2
Population Change Between 1980 & 1990 by Race & Ethnicity, U.S.

	1980		1990		Change		
	N	%	N	%	N	Increase	% of change
Total Population	226,545,805	100.0%	248,709,873	100.0%	22,164,068	9.8%	100.0%
White	188,371,622	83.1%	199,686,070	80.3%	11,314,448	6.0%	51.0%
Black	26,495,025	11.7%	29,986,060	12.1%	3,491,035	13.2%	15.8%
Amer Indian	1,420,400	0.6%	1,959,234	0.8%	538,834	37.9%	2.4%
Asian & Pacific Isl.	3,500,439	1.5%	7,273,662	2.9%	3,773,223	107.8%	17.0%
Other	6,758,319	3.0%	9,804,847	3.9%	3,046,528	45.1%	13.7%
Hispanic	14,608,673	6.4%	22,354,059	9.0%	7,745,386	53.0%	34.9%

Sources: Data are from the 1990 Census Summary Tape file, 1A. The data were obtained from the U.S. Census Bureau Regional Office, Los Angeles, CA. Also see U.S. Bureau of the Census 1991, April.

Table 3
Bilingual Abilities of Non-English-Language Speakers, by Age, for U.S., 1990

	Total NEL Speakers		Bilinguals		NEL Monolinguals	
	N	%(Col/Row)	N	%(Col/Row)	N	%(Col/Row)
5-17 yrs	6,322,934	19.9% 100.0%	5,415,371	21.5% 85.6%	907,563	13.6% 14.4%
18+ yrs	25,522,045	80.1% 100.0%	19,757,407	78.5% 77.4%	5,764,638	86.4% 22.6%
5+ yrs	31,844,979	100.0% 100.0%	25,172,778	100.0% 79.0%	6,672,201	100.0% 21.0%

Source: Data are from U.S. Bureau of the Census, 1992, Special tabulation 1990 CPH-L-96. Tables ED90-3, 4, and 5: Language use and English ability. Persons 5 years and over; 5-17 years; and 18 years and over, by state: 1990 Census. Washington, DC: Author.

Note: Bilinguals were constructed by taking those who "speak a language other than English at home" and also "speak English well or very well." Non-English monolinguals were constructed by taking those who "speak a language other than English at home" and also "speak English not well or not at all."

BEST COPY AVAILABLE

Table 4
Change in Number of Spanish Speakers
Between 1980 & 1990, by Age, U.S.

	1980		1990		Change		
	N	%	N	%	N	Increase	% of change
5-17 yrs.	2,947,051	26.5%	4,167,653	24.0%	1,220,602	41.4%	19.5%
18+ yrs.	8,170,555	73.5%	13,177,411	76.0%	5,006,856	61.3%	80.4%
5+ yrs.	11,117,606	100.0%	17,345,064	100.0%	6,227,458	56.0%	100.0%

Source: Data for 1980 are from U.S. Bureau of the Census, 1982, March. Provisional social and economic estimates from the 1980 Census. (PHC-80-S1). Washington, DC: USGPO. Table P-2. Data for 1990 were taken from U.S. Bureau of the Census. (1992). Special tabulation 1990 CPH-L-96. Tables ED90-3, 4, and 5: Language use and English ability, Persons 5 years and over; 5-17 years; and 18 years and over, by state: 1990 Census. Washington, DC: Author.

Literacy, and particularly English literacy, is so important for success in this society that we should have the best possible description of the distribution of these abilities for the nation. But, despite the number of literacy surveys undertaken in this country over the last two decades, very little data have been produced or released on language minority adult literacy. In most instances, the sponsors have not taken the nation's ethnic or linguistic diversity into account in designing the studies or analyzing the data, other than to distinguishing between White and Black races. This leaves us with a skewed picture of the nature of literacy and its distribution within the national population. When these studies have supplemental samples of ethnic minorities and there are language and literacy data related to these subsamples, these data are often not analyzed or studied, so they yield little of what they could contribute. A more specific focus on cultural/racial/linguistic diversity in the design and analysis of the studies would provide for a more detailed, accurate, and textured picture of literacy in the nation. Support for specific language and literacy analyses of extant data sets would also be useful in advancing our knowledge.

This country is changing rapidly as a result of internal migration, external migration, and the differential rates of natural increase (births over deaths) among racial and cultural groups. National surveys monitor these changes and others. Descriptions of language and literacy characteristics are important in several ways, not the least of which is

BEST COPY AVAILABLE

that they help us define our national cultural identity. The recent debates over cultural literacy and common culture present different value positions and should be informed by survey data (see especially the debates around Hirsch, 1987). Furthermore, national statistical studies very often inform (not determine) national policies and programs. If language minority diversity is absent from these studies or is presented in a distorted manner, the policies and programs may not address the needs of these groups.

One of the results of a distorted picture of the national diversity in languages and literacy is that we tend to fill the gaps in our knowledge and understanding with ideological content, particularly with what I have called the English language ideology (Macías, 1985a). This is manifested in adult literacy programs and services by the refusal of literacy providers to serve adequately the needs of language minority adults, and sometimes their refusal to allow them entry into adult literacy programs. Very often these programs refer language minority adults seeking literacy instruction to English as a second language (ESL) classes, without understanding that most of these classes teach oral English rather than English literacy. School districts often provide confusing reasons to justify the distinction that is often made between adult basic education (ABE) and adult ESL programs (Kalmar, 1992).

Finally, it is important to recognize the relationship of the national data sets to local and qualitative research. In the past several years, major qualitative studies have reported on language and literacy abilities and use among particular groups within the nation. These have helped advance our knowledge of literacy functions and uses as well as the relationship between community and school definitions of literacy. Yet, we do not have much information about how these community literacy functions and definitions of literacy are distributed across different communities or particular states in the nation. Large-scale, national quantitative research studies can provide some of this information, but large-scale surveys are not better than local or qualitative studies. Both are needed, and each can contribute answers to questions that the other cannot. We should keep these qualitative studies in mind as we discuss the values of national data sets.

Overview of National Surveys and Data Sets

At least 15 national surveys were conducted between 1975 and 1990 and several between 1990 and 1992 that have contributed to our knowledge of language minorities, literacy, and biliteracy. These studies, however, vary in their quality and detail. They each provide us with part of the national linguistic diversity and literacy picture (and we should keep in mind each of these parts as we attempt to piece together the broader picture), but they vary on several key dimensions: the types of measures of language and literacy used, the kinds of information gathered in background questionnaires, and the sample sizes. (See Table 5 for a summary of the differences among studies.)

Measures of language and literacy

The surveys have used three different types of measures of English oral language proficiency and literacy: direct measures (e.g., performance on a test), indirect measures (usually self-reported assessment of literacy ability or non-English language abilities), and surrogate or substitute measures (often the number of years of school completed in the United States as a surrogate for literacy). Each of these types of measures must be clearly understood in order to appreciate the value of the data sets for our purposes. Even the direct measures have varied widely in how they define literacy (Kirsch, 1990). Almost all of them implicitly or explicitly assume *English* literacy as the focus of the surveys.

Types of information gathered in background questionnaires

The data collection instruments for the surveys have usually included a household screener to identify eligible households and individuals, a background questionnaire, and a literacy measurement instrument. Several of these surveys have collected information about both the English and non-English language and literacy abilities of the respondents through background questionnaires that have been translated into Spanish, providing some information on bilingual and biliterate abilities as well as on bilingual survey methodology. However, the information provided by these background questionnaires is often ignored by researchers and policymakers. When the sample size for a survey is small or the measures narrow, it is important to look at the background questionnaire for possible additional information on language diversity.

Table 5
Selected Summary Characteristics of National Language Data Sets, 1975-1992

Survey	Sample Size	Language Background Variable	LEP Variable	Literacy Data	Literacy Measure
1975 Current Pop. Survey–Survey of Languages Supplement (CPS-SLS)	42,000 HH	yes	no	no	surrogate
1976 Survey of Income & Education (SIE)	440,000	yes	no	no	surrogate
1978 Children's English & Services Study (CESS) 1 & 2	2,200	yes	yes	yes	direct
1979 National Chicano Survey (NCS)	1,000	yes	no	yes	indirect
1980 Projections Study–5-14 yr olds	NA	yes	yes	no	surrogate
15+ yr olds	NA	no	no	surrogate	
1980 Census	33 Million	yes	no	no	surrogate
1982 English Language Proficiency Study (ELPS)	9,000 HH	yes	yes	yes	direct
1986 Young Adult Literacy Survey (YALS)	3,600	yes	yes	yes	direct
1990 Census	41 Million	yes	no	no	surrogate
1990 DOL Workplace Literacy Survey (DOL-WLS)	5,800	yes	yes	yes	direct
1992 National Adult Literacy Survey (NALS)	13,000	yes	yes	yes	direct
1992 State Option to NALS	1,000+ per state	yes	yes	yes	direct

HH = households

BEST COPY AVAILABLE

Sampling limitations

All of these studies have been based on samples. Even the decennial census collects data from a sample of the population that fills out what is termed the "long questionnaire." The size of the samples for all other surveys is much smaller than the 16% sample in the 1980 and 1990 censuses (giving sample sizes of 33 million and 40 million, respectively) and, in some instances, so small that only two-way cross tabulations can be done for analysis. This means that when we are interested in three variables, like ethnicity, language background, and literacy (or gender, place of birth, age), the cell sizes are often too small to provide a stable picture or description.

Another concern, besides the sample size of these surveys, is the composition of the samples. Many of these samples were selected based on general population characteristics, like gender, age, and race, as well as geographic location—rural, urban, or suburban. Rarely have the sample selection criteria included language or literacy backgrounds. These variables may have been afterthoughts or added as the result of a supplemental sample to the survey. Where they have been included, they make the study and its results very special. In addition, because almost all of these surveys were designed to assess English literacy, samples may have excluded individuals with little or no proficiency in English from being respondents, or from the direct measure data, or from the analyses. So even if there is a substantial representation of language diversity in the sample, some subjects may be excluded from selection or from analyses because of their limited English proficiency.

Even with these variations and shortcomings in mind, many of the national data sets provide valuable stop-gap information. Of the studies described below, seven were part of a systematic attempt at developing language minority information for bilingual education policy needs, and so reflect consistent definitions and concepts with slight variations: (1) 1975 Current Population Survey—Survey of Languages Supplement (CPS-SLS); (2) 1976 Survey of Income and Education (SIE); (3) 1978 Children's English and Services Study (CESS); (4) 1980 Projections Study; (5) 1980 Census; (6) 1990 Census; and (7) the 1982 English Language Proficiency Study (ELPS). Three others were developed with a literacy policy mandate and provided for similar direct measures of English literacy, but included language minority data in their designs: (1) 1986 Young Adult Literacy Survey

(YALS); (2) 1990 Department of Labor Workplace Literacy Survey (DOL-WLS); and (3) the 1992 National Adult Literacy Survey (NALS). Only one was specifically designed to survey a national language minority sample, using bilingual, biliterate survey methodology: 1979 National Chicano Survey (NCS) (see Figure 1). The combined data wealth generated in these surveys is impressive.

Figure 1.
Developmental Relationship of Selected National Surveys

Bilingual Education	Literacy Policy	Ethnic/Language Minority
1975 CPS-SLS		
1976 SIE		
1978 CNS		1979 NCS*
1980 Projections Study		
1980 Census		
1982 HLS	1984 NAEP	
	1986 NAEP	
	1986 YALS	
1990 Census	1990 DOL-WLS	
	1992 NALS	

*There are other such surveys, but none which has matched the developmental work of the NCS to assure the validity of the bilingual research methodologies and design. The federal government's preferred mode for reaching language minorities, principally the Latino population, over the last decade has been supplemental samples and questionnaires to existing surveys. A National Survey of Latinos, undertaken in 1989 by the Institute for Survey Research at Temple University and the Center for Mexican American Studies at the University of Texas, Austin included a Latino Questionnaire that was specifically designed to collect data on the national Latino population in English and Spanish, but I have little other information on it at this time.

BEST COPY AVAILABLE

Selected National Studies

Selected surveys and studies are discussed below, including the National Adult Literacy Survey, which collected data in the Spring and Summer of 1992. They are reviewed in chronological order to indicate the developmental nature of some of the key concepts and the overlap of some of the efforts.[1]

1975 Current Population Survey—Survey of Languages Supplement (CPS-SLS)

In response to debates and amendments surrounding the 1974 Bilingual Education Act, the federal government initiated a series of studies that resulted in a rather dramatic shift in language-related national data collection. These studies were designed to answer the question, "How many students in the nation are in need of bilingual education?" As a result of reviewing the national legislation, several key concepts and operational definitions were developed for "non-English language background" (NELB) or "language minority" (LM), and "limited-English-proficient" (LEP). These were not new concepts to the educational field or in the research literature, but to the U.S. data-gathering agencies, they were new.

A second question was also asked: "How can this estimate be derived from a national study?" The answer came from several quarters, including the Center for Applied Linguistics, which developed a Measure of English Language Proficiency (MELP) under contract to the National Center for Education Statistics (NCES) (Macías & Spencer, 1983, Chapter 1). The MELP was a series of survey questions correlated with data on elementary school language minority children who had been classified as needing bilingual services because their English proficiency was limited. The idea was to identify the pool of language minority individuals from which non-English-proficient and limited-English-proficient students could be identified, and then to assess their English proficiency to arrive at the estimate.

These non-English language background questions were field tested in the July 1975 Current Population Survey (CPS), a 42,000-household survey conducted monthly by the Census Bureau. The results of the CPS-Survey of Languages Supplement were reported in Chapter 4 of the *The Condition of Bilingual Education in the Nation* (U.S. Commissioner of Education, 1976). A shorter list of questions was identified as useful for surveys and valid for obtaining the non-English language background pool.

1976 Survey of Income and Education (SIE)

In 1976, the U.S. Census Bureau undertook one of the largest national surveys under congressional mandate to produce an estimate of poverty at the state level, in order to reformulate several national programs whose funding depended on this information. Other agencies took advantage of this survey by adding items to the questionnaire and supplemental samples for particular analyses, in what was informally touted as a mid-decennial census because of its size. The survey collected information from 151,000 households and 440,000 individuals. The NCES and U.S. Office of Bilingual Education added the language background questions developed and field tested with the 1975 CPS. They also worked to assure an adequate sample for the survey so that it would yield language information that could be used to draw a subsequent sample stratified by language characteristics for the Children's English and Services Study (discussed below), which would include a direct measure of English language proficiency. The survey also used a more specific list than previous surveys of racial and ethnic identifiers, especially for the Latino subgroups, which provided for better national coverage of racial and ethnic groups.

The results of the SIE were published by the National Center for Education Statistics (1978a, 1978b, 1978c, 1979) and represented the first major description of the current (as opposed to retrospective) language abilities of the national population. The SIE also produced a major data set that has been heavily analyzed (see López, 1982; Macías, 1985b; Veltman, 1983, for several such studies looking at language issues). With the completion of the SIE, we could describe the language minority diversity of the national population—including those who did not speak English at all—by state, language, and age. However, we could not provide an estimate of those who were limited in their English proficiency except in a gross indirect manner and with no indication of literacy ability.

1978 Children's English and Services Study 1 and 2 (CESS)

The Children's English and Services Study was designed as a follow-up to the SIE to determine the size of the national language minority population and the proportion of individuals in this population between the ages of 5 and 14 years of age who were limited in their English proficiency (including speaking, listening, reading, and writing). A direct measure of English proficiency that correlated

with schooling classification practices, the Language Measurement and Assessment Inventory, was developed as a survey instrument. The CESS 1 screened 35,000 households and tested 2,200 school-age non-English language background individuals. CESS 2 followed a subset of those individuals into the schools to see what kinds of educational services they were receiving.

An important methodological contribution of the CESS was an index of the proportion of LEP individuals 5-14 years of age by language background within four regions of the country that could be linked with the SIE to get more detailed information about the national LEP population (which was later used with the 1980 Projections Study below).

The CESS data were not as widely analyzed as other data sets, although the National Institute of Education published a two-volume report on the data and the analyses that were done by the government (O'Malley, 1981).

1979 National Chicano Survey (NCS)

This survey was principally funded by the National Institute of Mental Health, with supplemental funding from other agencies and foundations. It was designed to draw a nationally representative sample of the adult Mexican-origin population and describe demographic and social characteristics and behaviors. The data collection instruments were in English and Spanish, and the data collection procedures were designed for a bilingual population, with extensive training of the bilingual field personnel. The language data included language background questions, language use questions, literacy ability questions, and language use case histories. This survey allowed researchers to develop a profile of the Chicano population's literacy abilities in English and Spanish (see Wiley, 1988, for a study on these biliteracy data).

1980 Projections Study

The Projections Study was not designed to collect data. It was designed to synthetically derive estimates and projections of the language minority and limited-English-proficient population of the nation. It continued the federal government's attempt to profile the language minority and limited-English-proficient characteristics of the national population for bilingual education policy needs. The LEP rates from the CESS were applied to the population characteristics of the SIE and linked with the national population projections devel-

oped by the Census Bureau to the year 2000 in five-year intervals. This study yielded LEP estimates by age for the 5- to 14-year-old population by state and language background, and language minority data by language and states for all ages (see Oxford-Carpenter et al., 1984).

1980 Census

The 1980 Census provided the opportunity to collect language background data for the nation that would surpass the SIE in detail and coverage. The Census dropped the mother tongue question it had included since 1890. This mother tongue question (What was the language spoken in the home of the head of household when he was a child?) was actually a household language question and was initially used as a surrogate measure of the number of immigrants and their immediate progeny in the country and their rate of assimilation. The question was replaced with questions on current language ability. These three questions were slightly modified from those developed and used in the CPS Survey of Languages and the SIE.

13a. Does this person speak a language other than English at home?

- yes
- no, only speaks English—skip to 14

13b. What is this language? _____

13c. How well does this person speak English?

- very well
- well
- not well
- not at all

(U.S. Bureau of the Census, 1980)

There were no specific direct or indirect literacy items on the Census.[2]

This was also the first Census that included the Latino origin question on the 100% "short form" questionnaire, which goes to the total population:

7. Is this person of Spanish/Hispanic origin or descent?
   - no, not Spanish/Hispanic
   - yes, Mexican, Mexican American, Chicano
   - yes, Puerto Rican
   - Cuban
   - other Spanish/Hispanic

(U.S. Bureau of the Census, 1980)

In prior decennial counts, a question on being Latino may have been asked only in certain states, or not at all, using surname and other techniques to arrive at estimates of this population. Language data were published by the Census Bureau and made available for secondary data analyses in 1983 and 1984.

1982 English Language Proficiency Study (ELPS)

The English Language Proficiency Study was designed as a follow-up study to the Census, using a language minority sample of the 1980 Census, that would collect language and literacy data using two direct measures—the Language Measurement and Assessment Inventory and the Measure of Adult English Proficiency (MAEP)—developed to identify the English literacy abilities needed by the adult population to access social services and benefits, especially from government agencies. The LEP rates for the school-age and adult populations derived from these two measures of English proficiency would then be applied to the 1980 Census to yield much more comprehensive and detailed information on the language and literacy characteristics of the national population, including updating the answer to the question of how many LEP individuals there were in the nation. This technique was similar to the one that applied the CESS LEP rate to the SIE. Unfortunately, this survey was caught in political infighting between different parts of the newly created U.S. Education Department, in a federal administration that was openly hostile to bilingual education and that politicized the educational research efforts of the federal government.

The ELPS was linked with the 1980 Census in limited ways. It was linked in 1987, in a special tabulation by the Education Department, to provide synthetic estimates of the school-age limited-English-proficient population (U.S. Department of Education, 1987). In 1986, limited (il)literacy results from the ELPS were released with no linkage to any other data set or systematic presentation of the data. No separate analyses have been made linking the ELPS and the 1980 Census for adults or specifically to answer questions related to literacy. There has also been no independent study or analysis of the MAEP used in this survey (Macías & Spencer, 1983). Despite these limitations, there was discussion during the Summer and Fall of 1991 about applying the ELPS in some fashion to the 1990 Census, to update these LEP estimates.

The 1986 Young Adult Literacy Survey (YALS)

The Young Adult Literacy Survey was undertaken by the Educational Testing Service using a new conceptual approach to literacy assessment named the "profiles approach" by the developers (see Kirsch, 1990; Kirsch & Jungeblut, 1986; U.S. Department of Education, 1990). The YALS framework for literacy included reading and writing tasks using real-world materials, and the analyses of the data derived three scales of literacy proficiency: prose, document, and quantitative. These scales reflected a move away from a single score distinguishing between literacy and illiteracy and from grade equivalents as in previous literacy surveys. Analyses of the items by text types also reflected a more complex notion of literacy assessment.[5] The document scale, for example, involved

> the number of features or categories of information in the question or directive that had to be matched to information in the document, the degree to which the wording in the question or directive corresponded to that in the document, and the number of distractors or plausible correct answers in the document. (Kirsch, 1990, p. 45)

The YALS background questionnaire (which was translated into Spanish) also included 32 items related to the language background of the respondents. About 80 persons used the Spanish questionnaire.

The YALS sample consisted of 3,600 persons 21 to 25 years old. Latinos and Blacks were oversampled at twice their rate of occurrence in the population in order to derive data that could be reported by race and Latino ethnicity, although the sample was not large enough to report by Latino subgroups. The survey included a seven-item screener for identifying individuals who had no literacy skills and for whom taking the assessment would be nonproductive, and individuals who were not proficient enough in English to be assessed. Approximately 1% of the sample fell into each of these two categories and so were excluded from the analyses of the data.

Several reports were published on the YALS, but limited data could be published on the limited-English-proficient or language minority part of the sample. The influence on the field of this approach to measuring literacy, however, was significant. One of its basic conclusions was that the youth of the United States were not

illiterate, but had some literacy problems; most could perform well on the prose scale but not well on the high end of the prose scale or on the document or quantitative scales (see Kirsch & Jungeblut, 1986).

1990 Census

The 1990 Census included the same current language ability and ethnicity questions as the 1980 Census. The language ability questions were on the sample (long) form, which, again, included about 16% of the population. The race/ethnicity questions were also replicated from the previous Census.[1] The ethnic data were released in 1991, while the language data were made available in mid-1992 (see Macías, 1993, for discussion of the ethnic and new language classifications used for reporting these data).

There were significant problems with the undercount of specific groups for the 1990 Census. Although other decennial census counts have had differential population undercounts for ethnic groups and the poor, the 1990 Census may be the first Census that did not improve over previous efforts at counting the population.

1990 Department of Labor Workplace Literacy Survey (DOL-WLS)

This survey was conducted by the Educational Testing Service for the U.S. Department of Labor. It used basically the same framework and direct measure of literacy as the Young Adult Literacy Survey, augmented with additional, new items. The background questionnaire included eight questions related to the subjects' language background.

It surveyed about 2,500 persons who were enrolled in a Job Training Partnership Act (JTPA) program and about 3,300 persons applying for jobs through the Employment Service or filing for Unemployment Insurance benefits. The results were compared to data collected through the 1986 Young Adult Literacy Survey and the 1992 National Adult Literacy Survey. The results were released in Fall 1992.

The 1992 National Adult Literacy Survey (NALS)

The NALS is the most current federal attempt at measuring literacy abilities and distribution of those abilities across the national population. This survey builds on the YALS and the Department of Labor study in its direct measure of literacy, the oversampling of Blacks and Latinos, and the language background questions. It is

unique in that it included an option for states who wanted to purchase a state-level sample to augment their national sample and in that it allowed for state-level analyses and reports. Since it is the most recent of the literacy studies, a more detailed discussion of NALS is warranted.

Definition of literacy

The following definition was developed.

> [Literacy involves] using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential. (Educational Testing Service, 1990, p. 5; U.S. Department of Education, 1990)

This definition was operationalized along three scales: prose, document, and quantitative literacy. Prose literacy tasks involved the knowledge and skills needed to understand and use information from texts that include editorials, news stories, poems, and fiction. Document literacy tasks involved the knowledge and skills required to locate and use information contained in job applications or payroll forms, transportation schedules, maps, tables, and indices. Quantitative literacy tasks involved the knowledge and skills needed to apply arithmetic operations, either alone or sequentially, that are embedded in printed materials, such as balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest from a loan advertisement. This framework and definition included reading and writing across each of the three scales (despite argument from some members of the Literacy Definition Committee that writing was not part of literacy; see U.S. Department of Education, 1990, p. 13).

Methods and measures

The survey was conducted by interviewers who used a household screener for selecting eligible households and respondents, a background questionnaire, and assessment booklets for the direct measure of literacy proficiencies. The background questionnaire took an average of 15 minutes to complete, was available in English and Spanish versions, and included the following 14 language background items:

> A-4. When you were growing up, what language or languages were usually spoken in your home?

A-5. What language or languages did you learn to speak before you started school?

A-6. What language did you first learn to read and write?

A-7. How old were you when you learned to speak English?

A-8. With regard to [the non-English language, NEL], how well do you: understand it when it is spoken to you; speak it; read it; write it?

A-9. With regard to [NEL], how often do you: listen to radio programs, tapes, or records in [language]; watch television programs or video tapes in [language]; read newspapers, magazines, or books in [language]; write or fill out letters or forms in [language]?

A-10. Tell me what language you use in each of the following situations: at home; at work; while shopping in your neighborhood; when visiting relatives or friends?

A-11. Have you ever taken a course to learn how to read and write English as a second language?

A-12. Did you complete this course?

A-13. Have you ever taken a course to learn how to speak and understand English as a second language?

A-14. Did you complete this course?

A-15. Which language do you usually speak now?

A-16. What other language do you often speak now?

A-17. With regard to the English language, how well do you: understand it when it is spoken to you; speak it; read it; write it; do arithmetic problems when you have to get the numbers from written materials?

The race/ethnicity questions included the following:

F-9. Which of the groups on this card best describes you?

A. White
B. Black, African American
C. American Indian
D. Alaskan Native
E. Pacific Islander
F. Asian (Specify: _____)
G. Other (Specify: _____)

F-10. Are you of Spanish or Hispanic origin or descent?

yes

no

F-11. Which of the groups on this card best describes your Hispanic origin?

A. Mexicano, Mexican, Mexican American, Chicano

B. Puerto Rican

C. Cuban

D. Central/South American

E. Other Spanish/Hispanic (Specify: _____)

(Educational Testing Service, 1991)

Other questions covered family background; respondent demographic data; schooling experiences; labor market status; self-perceptions of literacy needs; and literacy practices at home, on the job, and in the community.

The literacy assessment took an average of 45 minutes to administer. All of the three scales involved reading, writing, arithmetic/computational, and problem-solving/reasoning tasks focused on simulated text stimuli taken from actual, popular publications—mainly newspapers, magazines, and commonly used forms.

Sample

The sample consisted of 13,000 adults, 16 years of age and older, residing in households and federal and state prisons within the United States. The sample was drawn using the 1990 Census and was stratified by region and race. Blacks and Latinos were oversampled within large urban areas to obtain reasonable sample sizes for reporting by race and ethnicity, although, again, the size of the Latino sample did not allow reporting by subgroups. The sample was weighted to the 1990 national population, adjusting for the estimated undercount.

State options

Since the national sample size did not allow for state-level analyses, the NALS had a state option. This option allowed states to purchase an additional sample of 1,000 respondents within the state that would augment that state's portion of the national sample in order to report at the state level.[5] The states were also given the opportunity to add five additional questions to the background questionnaire.

This option was important for several reasons. We have already noted some of the limitations in reporting by subgroups because of the sample size. There are other limitations dictated by the national scope of the survey and the costs involved. The sins of the national survey ought not to be uncritically inherited by the states. Some of the states (California, New York, Illinois, Texas, Florida) have large numbers and proportions of language minorities, and these characteristics should have been taken into account in the data collected for that state, especially in non-English literacies. Although there was no modification of the direct measure of English literacy, the background questionnaire should have been translated into Chinese, Navajo, and other major local languages in addition to Spanish. The states and jurisdictions that signed up for the NALS state option were California, New York, Illinois, Texas, Florida, Washington, Louisiana, Indiana, Iowa, New Jersey, Ohio, and Pennsylvania.[6] This state option was an important opportunity to redress some of the limitations of national surveys, and participation in similar options to national surveys should be advocated heartily by those interested in biliteracy questions that are not easily studied within small national sample frameworks.

Implications of National Survey Research for Understanding Language Diversity, English Literacy, and Biliteracy in the Nation

The definitions and concepts of literacy developed in the United States since 1975 are useful for future studies of language proficiency and literacy. However, our institutional memory regarding these surveys is close to being lost, with history repeating itself. Out of the Bilingual Education Act research, we have the two core notions of "non-English language background/language minority (NELB/LM)" and "non- or limited-English-proficient." The NELB/LM designation was designed to be an inclusive category that would be the pool from which, or within which, all individuals (not just school-age youngsters) who were limited in their English could be found. It was also an upper limit of the number of limited-English-proficient individuals. This pool of individuals was identified through surrogate (probability) characteristics, like foreign birth, living in a community or household where a language other than English was spoken, or speaking a non-English language. The CESS used current household

languages as the primary indicator of non-English-language background (excluding mother tongue and nativity).

Using these household language identifiers, there is quite an overlap with some ethnic groups (e.g., Chinese-speaking households tend to be occupied by persons who are ethnically Chinese), but not a 100% overlap. It has become an easy surrogate identification, however, over the last few years, to use ethnic identifiers for language minorities. This confuses the two categories. If we define language minorities by non-English household languages, then English monolinguals who are members of ethnic minority groups are excluded. The size of this excluded group may be significant. On the other hand, if we define language minorities as the same as ethnic groups within which there are large numbers of NELB speakers, then this should also be made clear. It is important for new studies to be clear how such a category as language minority or non-English-language background is being used or could be used.

The limited-English-proficient (and non-English-proficient) category was a subgroup of language minority. The term "limited English speaking ability" was taken from the bilingual education legislation of 1968 and referred only to understanding and speaking English. The CESS Advisory Committee in 1977 and the Bilingual Education Act in 1978 added reading and writing to the definition, and the term became "limited-English-proficient" (LEP). The CESS also determined that English proficiency would be the exclusive criterion for the LEP population, irrespective of the person's proficiency in the non-English language (comparing a person's ability in one language to another is an attempt at identifying the person's language dominance)." In many ways, this standard has survived and expanded, with the Office of Civil Rights, for example, moving from a language dominance standard to an English proficiency standard during the 1980s (U.S. Department of Education, 1991).

The prevalence of the English proficiency standard is useful because it focuses on the critical characteristic that drives bilingual education programs for K-12 schooling, that of students acquiring English proficiency so they can participate effectively in an all-English classroom. It minimizes, however, the existence of the non-English language, with the result that school and program personnel ignore the non-English language resources of the learner. This is a

particularly grievous position when it comes to adult English literacy programs serving language minority populations.

Background questions, especially those in the NALS, recognized these two core concepts of non-English-language background and limited English proficiency and were designed to distinguish: (a) between oral bilingualism and biliteracy; (b) between environmental (group) bilingualism and individual bilingualism; and (c) among acquisition, ability, and use of more than one language. The first distinction is reflected in questions regarding the four modalities (also called channels, skill areas, or components): speaking, listening, reading, and writing.

The second distinction is reflected in questions about household languages (regardless of whether or not the respondent speaks them) and languages of the community. In bilingual communities, individuals range in their knowledge and ability to use the two languages from monolingualism in one of the languages, to varying degrees of bilingualism, to monolingualism in the other language, yet almost everyone shares the speech norms of the community.

The third distinction involves questions about when and in what order the respondents acquired each language,[8] how well they believe they know the languages, and when, where, and for what purposes they use the languages.

Each of these distinctions has been previously used as a definition of language proficiency, but they represent quite different notions. These distinctions have also been central to debates about literacy definitions (see Macías, 1988, p. 3; Venezky, 1990). They have not only been staples of sociolinguistic work, but have also been woven into the development of national (language) surveys over the past couple of decades.

In addition to these core definitions or notions, several others come to mind, but only tangentially from these surveys. The language of initial literacy is the language of the first literacy acquired, regardless of the pattern of (oral) language acquisition of the individual. When we refer to native language literacy, we refer to literacy in the native (first) language of the individual. Second language literacy refers to literacy in the second language of the (sequential) bilingual individual, implying no native language literacy. Biliteracy reflects literacy in two languages.[9] The distinctions between environmental/community/household bilingualism and indi-

vidual bilingualism, acquisition patterns, ability, use/functions, can also be applied to literacy.

While these terms do not all come specifically from the surveys, they are useful in guiding survey instrument development and the conceptualization of what information is needed in biliteracy research.

The information about this nation's linguistic diversity generated by these surveys has been great. Language surveys were not new to the world in 1975. But the number and quality of language surveys undertaken in this nation between 1975 and 1990 were impressive. Yet, the need for broader and more in-depth descriptions of the NELB population, especially their (bi)literacy characteristics, is still high.

The information we derived and can derive on English literacy from these data sets varies. Obviously, if there is no literacy measure, the data set is not useful for this purpose. However, as we analyze the data sets that do have an English literacy measure, we should keep in mind the coverage of ethnic and linguistic minorities within the sample. We know that in some cases exclusion of non- and limited-English-proficient respondents from the survey or from the analyses has skewed the results toward higher English literacy rates. The questions generated by this exclusion have to do with "how much?" and "is this significant?" While the impact may not be significant for the national population, it certainly plays a heavier role in subgroup analyses. This is particularly important when we compare the results across data sets.

A case in point is the 1984 and 1986 National Assessment of Educational Progress (NAEP). The NAEP changed hands from the Education Commission of the States to the Educational Testing Service in 1983. As part of this change a number of modifications in the design of the assessment and the instruments also took place. One new instrument was the *Excluded Student Questionnaire*, which indicated how many students were excluded from the NAEP and why. One of the reasons for exclusion was limited English proficiency.[10] In 1984, and again in 1986, the U.S. Office of Bilingual Education and Minority Languages Affairs (OBEMLA) funded a language minority supplemental sample to the NAEP, and also included additional language background items to the questionnaires, in order to obtain educational achievement data for language minority students and, if possible, LEP students.

While we received additional information from the sample supplement, and certainly better information on when and why schools excluded students from the NAEP, we were left with difficult data to analyze, and we realized that the NAEP results were not reflecting the total national enrollment of students. The decision to exclude or include LEP individuals from a survey or assessment should be made with consideration of the impact on the overall purpose of the study. In the 1992 NALS, for example, it was more important to get a good profile of the total national population on English literacy scales, and be able to indicate how that profile was influenced by the inclusion of limited-English-proficient adults in the sample. It was also important to get self-report data on non-English language and literacy abilities, even though the direct measure of literacy was in English. The design options for national surveys have to be widened to include items on language and ethnic backgrounds, for better understanding English literacy as well as biliteracies.

We already have the ethnic and language data in the 1990 Census allowing stratification of the sample frames on these variables. These surveys should also take into account the undercount of minorities in the 1990 Census, as the NALS did. In addition, the NALS, with the state option, has given us information on some aspects of biliteracy from the background questionnaires. It is not only possible, but very desirable, to pursue another National Chicano Survey or similar activity, with a greater focus on biliteracy, that would extend coverage to other ethnolinguistic minority groups.

Sampling frames need to reflect the linguistic diversity of the nation. Data collection instruments and procedures need to accommodate language minority populations in securing bilingual and biliteracy data. Surveys in Spanish and other non-English languages should be part of the mandates and capabilities of the various national data collection agencies. The NALS for 1996 (if pursued) should include a direct Spanish literacy measure as well as an English one.

There is a need for linking national surveys with local quantitative and qualitative studies. Not every aspect of linguistic diversity can be addressed through national surveys. They are also time-consuming and very expensive. These surveys should be complemented with a generous set of grant competitions on various issues related to biliteracy, supporting local and university-generated research. In addition, the Current Population Survey should include a Survey of

Languages Supplement on a regular basis (it already includes a regular supplement on education, for example). Alternatively, language questions could be added to the special supplement on Latinos included in the CPS every March. Such questions could be added to special supplements on other ethnic minorities as well, if and when such supplements are included in the CPS in the future.

Finally, in state options to national surveys, the ethnic/racial categories should be standardized and made detailed enough to allow for state-level and ethnic subgroup analyses, rather than be limited to a set of general categories rationalized by small national samples, but lost for the states.

Conclusion

As this nation becomes more like the rest of the world in terms of racial, ethnic, and linguistic diversity, the need for reflecting that diversity in the literacy data we collect increases. The development of national language and literacy surveys since 1975 has given us a better picture of language diversity and bilingualism in both non-English languages and English. Key concepts and definitions to conceptualize part of this diversity have proven useful for descriptive, analytic purposes and for policymaking. Yet more can and should be done.

Literacy surveys are providing better information about ethnic and racial diversity and language background, but not better information about biliteracy. NALS bears close watching and deserves secondary analysis. There is much more we can do to improve biliteracy surveys and bilingual survey methodologies as well.

The challenges are before us. Let us not merely inherit the sins of the previous surveys while seeking absolution from their shortcomings. Language survey efforts from 1975 through 1982, followed by similarly important developmental work in the 1980s in defining and measuring literacy, indicate that we can do much in a short period of time with the will to do so. Let us not ignore these developmental phases so that we are not condemned to repeat them.

Notes

[1] For a more detailed analysis of those studies specifically addressing the estimate of language minority and limited-English-proficient populations, see Macías & Spencer, 1983.

[2] The 1965 Voting Rights Act provided for the use of ethnicity, voting, and literacy rates to identify possible violations of the Act. In 1975, Congress added the language minority amendments to the Act, which added non-English language background of Latinos, Asians, AmerIndians, and Alaskan natives as an additional factor that triggered coverage of the Act. In 1982, Congress revised the definition of language minority and added limited or no oral/comprehensive ability in English to narrow the coverage of the Act quite a bit. The definition of illiteracy was "less than a fifth grade education." The Director of the Census Bureau was instructed to identify the jurisdictions covered by the Act using the 1980 Census data. The Director did so in 1984 and attempted to validate this procedure with the use of the English Language Proficiency Study.

[3] During the developmental phase of the instruments, a suggestion was made to include two questions for every item on the assessment, designed to find out if the person was familiar with the task on the item and whether or not they had a need to perform that task in their daily life. This suggestion was made because other research indicated the differential uses of literacy across class, race, and ethnic groups. These items were included in the field test. As important as this information is to understand and interpret performance on the assessment, especially across racial and ethnic groups, answering them became so repetitive and boring that they became distractors for the respondents and interrupted the assessment. They also lengthened the time for the assessment, leading to less time for the performance tasks, and thus the number of performance items that could be included or completed. This kind of information should be pursued through other types of literacy research and linked, if possible, with these survey data.

[4] The comparability of the language and ethnic data between the 1980 and the 1990 Censuses allows us to analyze changes in language abilities of the United States population in very detailed ways.

[5] This is similar to the 1990 and 1992 NAEP experiments that also allowed for states to buy an option to increase the sample of students

assessed within a particular state in order to get state-level reporting. The state option for the NAEP was, in part, motivated by the accountability movement in public schooling. The state option may become a more familiar part of national surveys in the future, making these considerations of sample all the more important.

[6] There apparently were federal resources available that could be used to pay for this state option, although it was not clear that all states knew this, wanted, or were able to access these monies. ETS identified at least one federal source of funds that could be used by the states and communicated this to all of them, including some of the nonstate jurisdictions, like the District of Columbia and Puerto Rico. The federal government should subsidize this state option, much as it does for the National Assessment of Education Progress, which had almost 100% state participation in 1990.

[7] This contrasted with the U.S. Department of Health, Education, and Welfare's Office of Civil Rights (OCR) definitions of "national origin" and "language discrimination" under *Lau v. Nichols* (1974). OCR used a relative language proficiency (or language dominance) standard to identify the different categories of students needing educational services regardless of their English proficiency. A student or group of students needed to be dominant in a non-English language and a member of a national origin group, and be discriminated against, to trigger this civil rights law protection.

[8] The usual distinctions in language acquisition patterns of bilinguals include whether the individual acquired the languages simultaneously (simultaneous or dual language acquisition) or sequentially (sequential bilingual). The latter type of bilingual can further be sub-categorized as an early sequential bilingual (acquired the second language before puberty) or late sequential bilingual (acquired the second language after puberty). In addition, if the second language is taught with the intention of replacing the native language, very often it is called subtractive bilingualism, while teaching a second language for enrichment purposes is generally referred to as additive bilingualism. If the individuals learned the languages informally, they are generally referred to as circumstantial bilinguals, while those who learned the second language formally are generally referred to as elective bilinguals.

[9] One of the results of the dominance of the ESL field in the polemics and terminology of school bilingualism is the over-generalization that the first language (L1) is the non-English language, and the second language (L2) is English. This is reflected in the school term "primary language" referring to the non-English language, even when there are no data or need to refer to relative language proficiencies or dominance. This lack of precision and specificity led to convoluted terms in 1980, when the Department of Education attempted to promulgate rules related to the *Lau v. Nichols* decision. One of the sets of classification terms used in these proposed rules was "limited-English-proficient, primary language other than English, English superior." These terms lead to a minimalization of simultaneous or dual language bilingual acquisition for individuals, and to a predominance of instructional models based on sequential bilingualism, rather than simultaneous bilingualism.

[10] One of the more critical questions in not only these surveys but also state and district achievement testing is what to do with LEP students, since all of these testing programs are conducted in English. There is often a wholesale exclusion of LEP students from the testing. A report from the National Education Goals Panel (1991, p. 19) recommended inclusion of LEP students in these assessments and assessments in non-English languages:

> *Examining in foreign languages.* The Resource Group considers it essential that children of limited-English-proficiency (LEP) be included in systems of nationwide assessment. They recommend that all children (including the limited-English-proficient) be examined for oral and written communication skills in English. In subjects other than English the group wants consideration to be given to testing LEP children in their language of instruction. The Resource Group also recommends that to encourage the foreign language competencies of native English speakers as well as to preserve the native language capacity of immigrant children, communication competencies of all children should be assessed in two languages, beginning in elementary school. (National Education Goals Panel, 1991, p. 19)

A responsible position on this issue cannot separate these two points.

References

Educational Testing Service. (1990). [The brochure for the National Adult Literacy Survey]. Princeton, NJ: Author.

Educational Testing Service. (1991). *The English background questionnaire. National Adult Literacy Survey*. Princeton, NJ: Author.

Hirsch, E.E. (1987). *Cultural literacy: What every American needs to know*. Boston: Houghton-Mifflin.

Kalmar, T.M. (1992). Drawing the line on minority languages: Equity and linguistic diversity in the Boston Adult Literacy Initiative. *Journal of Adult Basic Education*, *2*(2), 84-112.

Kirsch, I. (1990). Measuring adult literacy. In R. Venezky, D. Wagner, & B. Ciliberti (Eds.), *Towards defining literacy* (pp. 40-47). Newark, DE: International Reading Association.

Kirsch, I., & Jungeblut, A. (1986). *Literacy: Profiles of America's young adults*. Princeton, NJ: Educational Testing Service, National Assessment of Educational Progress.

López, D. (1982). *Language maintenance and shift in the U.S. today: Basic patterns and social implications*. Los Alamitos, CA: National Center for Bilingual Research.

Macías, R.F. (1985a). Language and ideology in the U.S. *Social Education*, *49*(2), 97-100.

Macías, R.F. (1985b). National language profiles of the Mexican-origin population in the United States. In W. Connor (Ed.), *Mexican Americans in comparative perspective* (pp. 238-308). Washington, DC: The Urban Institute.

Macías, R.F. (1988). *Latino illiteracy in the U.S.* Claremont, CA: The Tomás Rivera Policy Center.

Macías, R.F. (1993). Language and ethnic classification of language minorities: Chicano and Latino students in the 1990s. *Hispanic Journal of Behavioral Sciences 15*(2), 230-257.

Macías, R.F., & Spencer, M. (1983). *Estimating the number of language minority and limited-English-proficient persons in the U.S.: A comparative analysis of the studies*. Los Alamitos, CA: National Center for Bilingual Research.

National Center for Education Statistics. (1978a, July). *Bulletin: The educational disadvantage of language minority persons in the U.S., Spring 1976*. (NCES-78-121). Washington, DC: Author.

National Center for Education Statistics. (1978b, August). *Bulletin: Geographic distribution, nativity, and age distribution of language minorities in the U.S., Spring 1976.* (NCES-78-134). Washington, DC: Author.

National Center for Education Statistics. (1978c, October). *Bulletin: Place of birth and language characteristics of persons of Hispanic origin in the U.S., Spring 1976.* (NCES-78-135). Washington, DC: Author.

National Center for Education Statistics. (1979, May). *Bulletin: Birthplace and language characteristics of persons of Chinese, Japanese, Korean, Filipino, and Vietnamese origin in the U.S., Spring 1976.* (NCES-79-144). Washington, DC: Author.

National Education Goals Panel. (1991, March). *Measuring progress toward the national education goals: Potential indicators and measurement strategies.* [Discussion document]. Washington, DC: Author.

O'Malley, J.M. (1981). *Children's English and services study: Language minority children with limited English proficiency in the United States.* Rosslyn, VA: National Clearinghouse on Bilingual Education.

Oxford-Carpenter, R., Pol, L., López, D., Stupp, P., Gendell, M., & Peng, S. (1984). *Demographic projections of non-English-language-background and limited-English-proficient persons in the U.S. to the year 2000, by state, age, and language group.* Rosslyn, VA: National Clearinghouse for Bilingual Education.

U.S. Bureau of the Census. (1980). *Official 1980 U.S. Census form.* Washington, DC: U.S. Department of Commerce, Bureau of the Census.

U.S. Commissioner of Education. (1976). *The condition of bilingual education in the nation.* Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education.

U.S. Department of Education. (1987). *Numbers of limited-English-proficient children: National, state, and language-specific estimates. Based on the 1982 English Language Proficiency Survey and special tabulations of the 1980 Census.* Washington, DC: Office of Planning, Budget and Evaluation. Unpublished paper.

U.S. Department of Education. (1990, July). *Report to the Congress on defining literacy and the National Adult Literacy Survey.*

Washington, DC: Author. (Available from the Division of Adult Education and Literacy)

U.S. Department of Education. (1991, June). *U.S. Department of Education: Elementary and secondary school civil rights compliance report, Fall 1992 district summary*. Draft. Washington, DC: Author. (Available from the Office of Civil Rights)

Veltman, C. (1983). *Language shift in the U.S.* Amsterdam: Mouton.

Venezky, R. (1990). Definitions of literacy. In R. Venezky, D. Wagner, & B. Ciliberti, (Eds.). *Towards defining literacy* (pp. 2-16). Newark, DE: International Reading Association.

Wiley, T. (1988). *Literacy, biliteracy, and educational achievement among the Mexican-origin population in the United States: A secondary analysis of the National Chicano Survey*. Doctoral dissertation, Department of Education, University of Southern California.

CHAPTER 2

Sociolinguistic Considerations in Biliteracy Planning

Arnulfo G. Ramírez
Louisiana State University

The creation of effective literacy education programs to meet the needs of language minority adults in a multilingual society like the United States requires addressing a broad range of sociolinguistic questions that can be approached from a language planning perspective. As a problem-solving activity, language planning is the realization of the language policy that a government adopts with respect to such issues as language diversity, minority language treatment, language standardization, or the national language question. Language planning stresses the social nature of language and its functions in society. It also takes into account both the attitudes of society's different ethnolinguistic groups toward different languages or speech varieties and the need for members of these groups to master different languages and dialects (Cooper, 1984). Thus, a language planning perspective is a useful one to bring to bear on the discussion of adult biliteracy.

Language planning is typically, though not necessarily, seen as the task of national governments seeking to accomplish broad social and political goals. García (1982) notes that countries can implement different kinds of language or literacy programs depending upon what they hope to accomplish. These can include educational programs designed to promote one or more of the following:

1. *Vernacularization*, the restoration of an indigenous language to establish it as a national standard (e.g., Tagalog in the Philippines);

2. *Internationalization*, the development of proficient bilinguals who can function effectively in the international community (e.g., English for Greek and Dutch students);

3. *Assimilation*, the incorporation of immigrant groups or ethnolinguistic minority groups into the mainstream culture (e.g., English programs for immigrant groups to Australia, or Hebrew for immigrants to Israel);

4. *Pluralization*, bilingual programs that enable different language and cultural groups to co-exist within a nation (e.g., Basque and Catalán language programs in Spain; Navajo language programs in the American Southwest).

Biliteracy programs, that is, educational programs that foster mastery of literacy skills in both the mother tongue and a second language, can serve to promote any one or more of the goals in García's framework, depending upon the extent to which literacy is developed in each language and for what purposes. Looking at Spanish and English in the United States, for example, one can find biliteracy programs that teach only initial mother tongue literacy skills to Spanish-speaking adults so that these skills might then be applied to the learning of English (serving the goal of assimilation), as well as programs that seek to develop literacy to the fullest extent possible in both languages (serving the goal of pluralization and, if Spanish literacy were developed to a level sufficient for conducting transnational exchanges, internationalization).

Ornstein-Galicia (1979) has developed a language planning model that takes into account sets of sociopolitical and linguistic factors. In terms of planning for biliteracy, the model can be used as a heuristic device for predicting the favorability of bilingual literacy education for a particular ethnolinguistic group. The model's sociopolitical dimension includes eight factors:

1. the demographic strength of the group,

2. the group's territoriality, or the specific geographic area(s) of residency it claims,

3. the cultural-religious distance that separates the ethnic group from the mainstream,

4. the ethnicity or ethos tending to promote intra-group solidarity to greater or lesser extents,

5. the relative socioeconomic status of the group, determining to varying degrees the needs of group members to become bilingual to survive or conduct business,

6. the level of political mobilization among members of the group,

7 & 8. the degree of congruence between local needs or aspirations and the national climate and federal policies, at the micro and macro levels.

The linguistic dimension of the model encompasses six factors:

1. the vitality of the minority language,

2. the history or formal, written tradition of the language,

3. the degree to which the language has been standardized with usage norms,

4. the linguistic distance from the dominant, national language with respect to alphabet, grammatical structure, and vocabulary,

5. language attitudes—the group's perceptions of its own language and that of other groups, and its commitment to using and studying the language,

6. the national language situation in terms of linguistic diversity, tolerance, and implicit or explicit language policies.

Sociopolitical factors can override linguistic considerations, but both linguistic and sociopolitical issues should be examined using this model to identify situations where biliteracy education is both warranted and likely to succeed for a given group of language minority adults.

Agents of Biliteracy Planning and Promotion in the United States

Literacy planning as a sociolinguistic activity is not the exclusive domain of state or federal governments. Individuals or groups of individuals can also engage in community literacy efforts designed to serve the needs of ethnolinguistic minority groups. In the United States, biliteracy language programs designed for adults are highly diverse in terms of sponsorship, learner characteristics, and focus. In addition to federal and state government support, sponsorship for literacy programs may come from city and county governments, community-based and religious organizations, and private businesses. The programs can be found in such places as community centers, libraries, prisons, churches, synagogues, factory lunchrooms, and housing projects. The adult learners may be immigrants, refugees, newly naturalized citizens, or native-born residents. They may differ widely with respect to personal background, educational experiences in the first language, professional training, and interest in

becoming literate in a second language. Some literacy programs may focus exclusively on the development of English language oral and written skills, while others may devote considerable attention to the maintenance of literacy traditions in the students' native language. While many programs strive to be learner-centered, with students themselves setting their own literacy-learning agendas, these same programs are also called upon to serve the agendas of outside parties. Shifts in sources of finding, in particular, can require changes in a program's official goals and objectives for literacy learning (Wrigley, 1991).

The Sociolinguistic Perspective: What It Has to Offer for Biliteracy Planning

Regardless of the institutions or organizations leading them, effective biliteracy planning efforts at the local, regional, and national levels must take as their starting point the existing patterns of language use in the communities to be affected by the planning effort. Examination of these language use patterns in the fact-finding phase of literacy planning can best be undertaken from a sociolinguistic perspective (Rubin, 1973). Achieving a true (as opposed to an idealistic) understanding of the complex language use patterns of an ethnolinguistic minority group can be difficult. This may be the case whether the fact finding for biliteracy planning is being conducted at the macro (national) or micro (local) level. Nonetheless, taking into account certain sociolinguistic phenomena, such as language varieties, sociolinguistic domains, language choice, and language attitudes, is particularly important to ensuring that biliteracy programs in the United States address the real needs of members of the ethnolinguistic communities they serve, as well as the sociopolitical goals of their sponsoring agencies. Understanding the ways members of an ethnolinguistic minority group actually use or might reasonably use different language varieties in their everyday lives can help prevent biliteracy planners from initiating projects that are likely to fail because they seek to develop literacy skills that are incongruent with the real-life literacy tasks confronted by learners in their communities.

At this point in our discussion of biliteracy planning, it is useful to look at the case of a particular ethnolinguistic minority to illustrate more concretely some of the complex sociolinguistic issues that

biliteracy planners in the United States have to confront as they develop educational programs. As diverse as this country's language and ethnic situation is today, we have many possibilities from which to choose. In the United States, one finds minority ethnolinguistic communities identified with indigenous American languages (e.g., Navajo, Hopi, Cherokee, Mohawk), European colonial languages (e.g., Spanish, French, German), and immigrant languages (e.g., Chinese, Italian, Greek, Japanese, Russian, Tagalog, Urdu). Languages like Spanish, French, German, and Chinese, to name a few, also exhibit variation reflecting the differing geographical origins and social backgrounds of their speakers. In the case of some languages, this variation may reflect the existence of distinct subcommunities within the larger ethnolinguistic group, reflecting the many layers of diversity in the U.S. language situation.[1]

The selection of Hispanics residing in the United States as a case-in-point offers several advantages. First, the sociolinguistic issues involving this group have been extensively studied, and there exists a body of literature to which we may refer. Second, language use among members of this group is exceptionally diverse and complex, given the multiplicity of national origins of U.S. Hispanics—including many whose families have lived in the United States for generations—and the dispersed regions of the country where they reside. Finally, Hispanics are the largest single ethnolinguistic minority group in the United States, and many readers of this volume will find a discussion of Hispanic issues to be directly relevant to their own literacy work. Let us, then, look at the case of Hispanics with regard to language varieties, language choice, language styles, and the distribution of written text types across languages.

Language Varieties

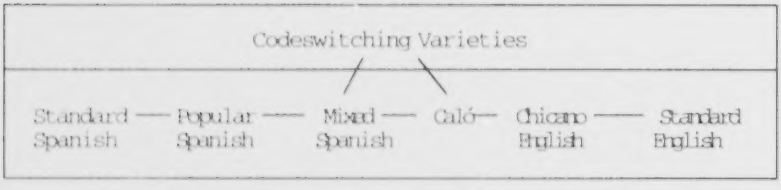
A number of varieties of Spanish have been identified as being spoken by Hispanics living in the United States. These include Mexican Spanish, particularly in the Southwest and large urban centers of the Midwest (Detroit, Cleveland, and Chicago); Puerto Rican Spanish, principally in the Eastern states (New York, New Jersey, Pennsylvania, and Connecticut); Cuban Spanish, in Miami, Boston, and New Orleans (Cárdenas, 1970); and Peninsular Spanish, spoken in Newark, New Jersey. Isleño, a dialect from the Canary Islands, still survives in Bayou Lafourche, Louisiana (Craddock, 1981). Within the

Southwest, four dialectal zones with some degree of overlapping are noticeable: (a) Texas Spanish, with considerable influence due to Mexican migration; (b) New Mexican and Southern Coloradan Spanish, which includes a number of archaisms due to its relative isolation, until recently, from the rest of the Spanish-speaking world; (c) Arizonan Spanish, with a number of linguistic features in common with New Mexican Spanish, but with a significant influence of northern Mexican Spanish due to its proximity to Sonora; and (d) Californian Spanish, an extension of Arizonan Spanish greatly influenced by borrowing from English (Cárdenas, 1970).

Sánchez (1983) argues that there are basically two principal varieties of Spanish in the Southwest. One is the standard and the other the popular. The popular can be further divided into urban and rural subcodes in many cases. Within each subcode of popular Spanish, there are special varieties such as Caló, which is an urban subcode. Differences among the standard and popular Spanish varieties occur primarily at the morphosyntactic level (the formation of word within sentence construction), although variation can exist at the level of words in the case of archaic terms, English loanwords, or rural vocabulary.

The language varieties used among Hispanics in the Southwest have also been described in terms of an English-Spanish continuum ranging from Standard (formal) Mexican Spanish to Standard (formal) English with several dialects or speech styles blending into each other between the two standard varieties (Elías-Olivares & Valdés, 1982). The continuum is illustrated in Figure 1.

Figure 1
Language Varieties Among Hispanics in the Southwest



Adapted by permission from Elías-Olivares & Valdés, 1982, p. 155.

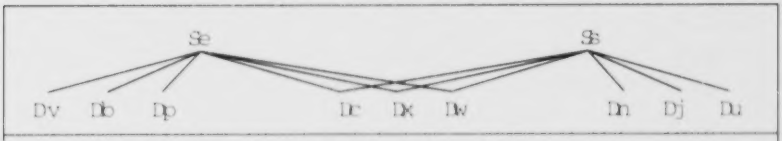
Differences among these Southwest varieties can be established on the basis of linguistic criteria. Popular Spanish, for example, contains a number of nonstandard features with respect to vowel and consonant changes, verb tenses and conjugations, and gender/number agreement rules. Mixed Spanish and Caló (also called Pachuco) contain elements of both English and Spanish, maintaining basic Spanish word order and using English pronunciation (*londri* for "laundry," *escrin* for "screen," and *esquipiar* for "skip"). Mixed Spanish can serve for informal speaking and sometimes is used by children who have not been exposed to either English or Spanish as a separate code. Mixed Spanish and Caló make extensive use of codeswitching, which involves the alternating use of the two languages at the word, phrase, clause, or sentence level. For example, while speaking Spanish, a speaker may say:

1. No voy a ir al gym.
   (I'm not going to the gym.)
2. Estoy muy cansado, so I'm going to bed.
   (I'm very tired, so I'm going to bed.)

In the case of codeswitching at the word level (1) and codeswitching at the clause level (2), English pronunciation and morphology are maintained with no attempt to adapt to Spanish.

The language situation among Puerto Ricans living in the New York City area, on the other hand, has been described in terms of a polyglossic model for English, codeswitching, and Spanish (Pedraza, Attinasi, & Hoffman, 1980). The verbal repertoire of Puerto Rican speakers may sustain several influences different in both content and kind, depending on their participation in different social networks and how they are influenced by the mass media, both electronic and print. Figure 2 illustrates the potential verbal repertoires of different members of this speech community with respect to the range of language varieties in active use.

Figure 2
A Polyglossic Model for English, Codeswitching, and Spanish in El Barrio



Se	= Standard English
Ss	= Standard Spanish
Dv	= New York local English vernaculars
Db	= Black English speech
Dp	= Puerto Rican English
Dc, Dx, Dw	= Varieties involving different types/levels of codeswitching in English and Spanish
Dn	= New York City Spanish
Dj	= Rural variety of Puerto Rican Spanish
Du	= Urban variety of Puerto Rican Spanish

Adapted by permission from Pedraza, Attinasi, & Hoffman, 1980, p. 90.

The polyglossic model hypothesizes that for Puerto Ricans living in New York the standard written forms of English and Spanish (Se, Ss) and their corresponding formal spoken dialects are set in dynamic relation with a number of spoken vernaculars. Puerto Rican speakers have varying abilities to use the different spoken varieties and written styles present in their speech community, some of which are presented in the figure. Varieties shown in Figure 2 include the following: (Dv) New York English or other local English vernaculars; (Db) the speech of African-Americans in New York; (Dp) the speech of Puerto Ricans raised speaking English; (Dn) the Spanish of Puerto Ricans born in New York City; (Dj) a more rural style of Puerto Rican speech; and (Du) urban Puerto Rican Spanish. (Dc), (Dx), and (Dw) are potential varieties of codeswitching between Spanish and English. Other language varieties not illustrated in this figure may also influence the verbal repertoires of Puerto Ricans in New York. These might include standard and vernacular varieties of both Spanish and English heard on television and radio, as well as the different Spanish vernaculars spoken by immigrants from other Spanish-speaking countries such as Colombia and the Dominican Republic.

Language Choice

The particular variety of language chosen for use in a specific communicative event may be influenced by a number of individual variables or combinations of variables associated with the situation itself, the participants, the topic, and the purpose of the interaction. Table 1 summarizes some of the salient factors that have been noted to influence language choice in bilingual communities.

Table 1
Factors Influencing Language Choice
in a Communicative Event

Characteristics of the participants	Situation
Language proficiency	Location/setting
Language preference	Presence of monolinguals
Socioeconomic status	Degree of formality
Age	Degree of intimacy
Gender	Topic
Occupation	Type of vocabulary
Education	Function of interaction
Ethnic background	To raise status
History of speakers' linguistic interaction	To create social distance
Kinship relationships	To exclude someone
Attitude toward languages	To request or command
Outside pressures	

Source: Grosjean, 1982, p. 136. Reprinted by permission.

In examining the patterns of English and Spanish use among Chicanos in the United States, Sánchez (1983) noted that language choice in a given sociolinguistic domain seemed to be strongly correlated with the degree of formality or informality of that domain. English was found to be used most typically in the formal societal domains such as work, government, and media, while Spanish was more often used in the informal contexts of home and neighborhood. At the same time, there are differences among Hispanics attributable to variables such as socioeconomic status and number of generations a given speaker's family has resided in the United States.

BEST COPY AVAILABLE

Table 2
Language Use Among Hispanics in the Southwest

	Middle Class			Working Class: Rural			Working Class: Urban		
Generation	1	2	3	1	2	3	1	2	3
Language Domain									
Home	S	B	E	S	B	B	S	B	E
Neighborhood	E	E	E	S	B	B	B	B	B
Recreation	B	E	E	B	B	B	B	B	E
Work	E	E	E	B	B	B	B	E	E
Media	B	E	E	B	B	B	B	B	E
Government	E	E	E	E	E	E	E	E	E

S = Spanish E = English B = Both languages/bilingual

Adapted by permission from Sánchez, 1983, p. 63.

Table 2 illustrates some of the dynamics of language choice among Hispanics in the Southwest.

All first-generation Spanish speakers use Spanish in the home domain regardless of their social class and the part of the country they live in. The middle class shifts to English entirely by the third generation, while the working class employs both languages in at least the neighborhood domain (among urban dwellers) and in other domains such as recreation, work, and media (among rural residents).

A variety of language use patterns can be found within a single sociolinguistic domain as well. At the level of the home, Zentella (1988) identified four distinct language use patterns among Puerto Rican families living in New York City.

1. The parents/caretakers speak only Spanish to each other and to the children; the children respond to their parents in Spanish but speak Spanish and English to each other. (This accounted for 26% of the 19 families in the study.)

2. The parents/caretakers speak Spanish to each other and to the children, but one of them sometimes speaks English to them. The children respond in both languages, preferring Spanish for the adults and English for their siblings (47% of the families studied).

BEST COPY AVAILABLE

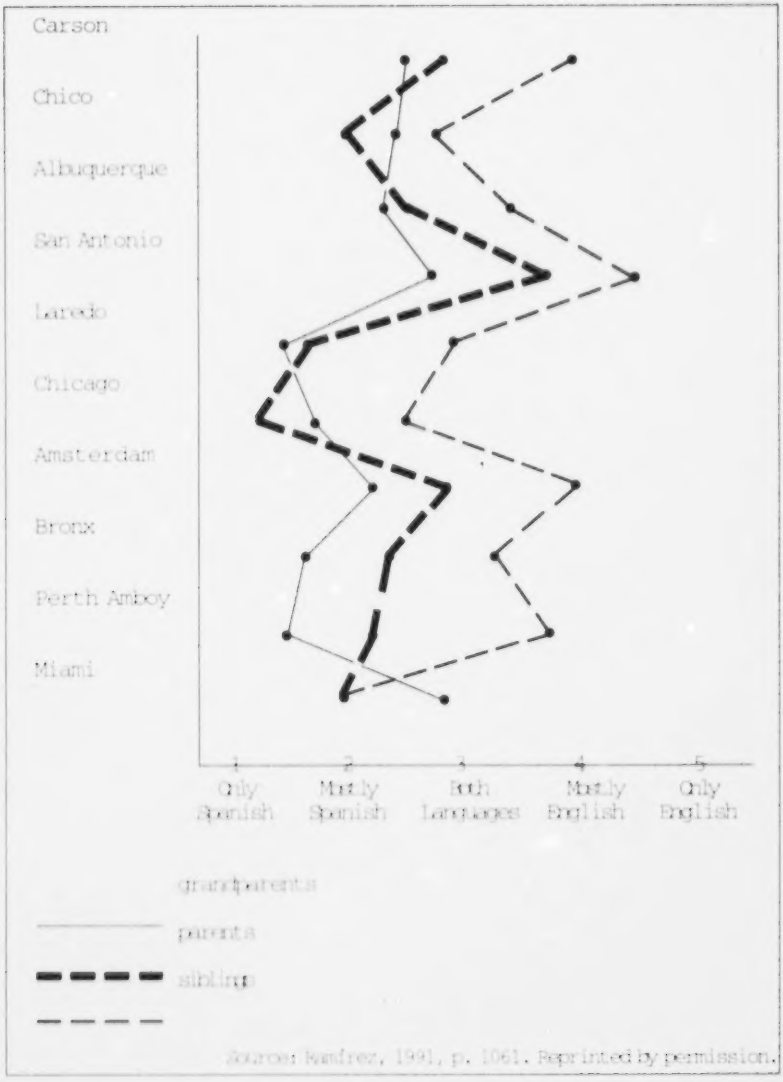
3. The parents usually speak English to each other and to the children; one parent speaks some Spanish to them. The children understand Spanish but respond in English and speak English to each other (16% of the families studied).

4. The parents codeswitch frequently among themselves and when speaking to their infants, who are just learning to speak (11% of the families studied).

These patterns were observed over a period of time using an ethnographic research approach. According to Zentella, in the majority of families in patterns one and two, Spanish is used among the parents, and at least one caretaker uses Spanish while speaking to the children. Parents in these two groups have emigrated to the United States usually after having spent their adolescent years in Puerto Rico. Children from these families tend to be more fluent bilinguals, often demonstrating a greater competence in English than in Spanish. Parents in pattern three include those born and raised in New York City and those who left Puerto Rico before late adolescence or who married a monolingual English speaker, who would speak mainly English to the children. Young couples born or raised in New York frequently codeswitch between English and Spanish with each other, and the children from these homes have some limited knowledge of Spanish, at least in the area of vocabulary.

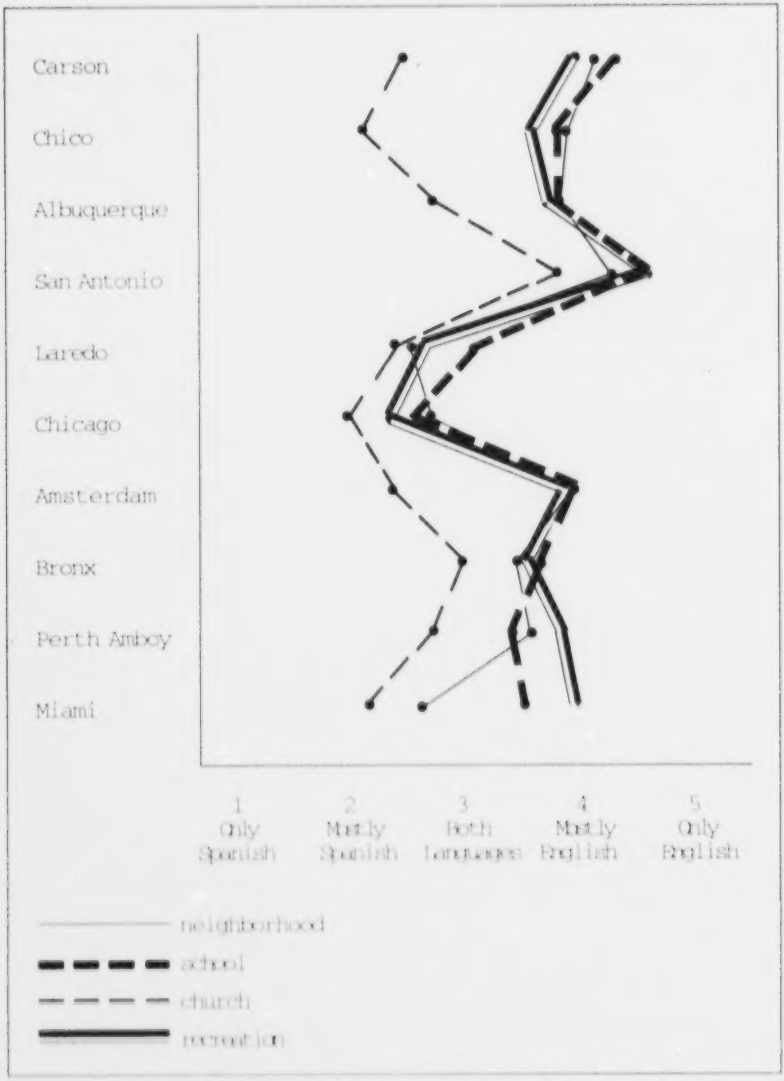
Ramírez (1991) documents the relative use of Spanish and English among Hispanic adolescents (N=549: 250 males and 299 females) in 10 urban centers involving Mexican-Americans (216=39.3%), Puerto Ricans (119=21.7%), Cubans (51=9.3%), and members of other ethnic groups. The results presented in Figures 3 and 4 differentiate between the uses of English and Spanish with respect to generation and domain. Spanish only is most frequently used when speaking to one's grandparents, mostly Spanish is used when talking with parents, and both languages or mostly English are used when interacting with siblings. Usage patterns according to domains indicate that the church context is the only other area outside the home where Spanish plays a major role among these adolescents. There are other observable differences in language use patterns associated with the particular locations where samples were drawn. These differences can be attributed to characteristics of the sample (e.g., place of birth, home language environment, proficiency in Spanish).

Figure 3
Use of Spanish and English to Communicate with Different Family Members in Ten Localities



Source: Ramírez, 1991, p. 1061. Reprinted by permission.

Figure 4
Relative Use of Spanish and English in Different Sociolinguistic Domains of Ten Localities



Source: Ramírez, 1991, p. 1062. Reprinted by permission.

BEST COPY AVAILABLE

Language Styles

In addition to language variation that is reflected in regional dialects and social dialects, speakers adopt different styles of speaking depending on the circumstances. Formal situations like lectures, newscasts, and public announcements call for careful speech, often based on prepared scripts that are read and sound like written discourse. Informal situations like casual conversations among friends involve unplanned speech that evolves through the course of the interaction. Some conversations involve the use of intimate language such as the talk between husband and wife or parents and children. In the work cited previously with regard to language variety and the codeswitching practiced by Hispanics in the Southwest, Sánchez (1983) found that even more frequently than switching codes, speakers shifted speaking styles (formal, informal, and intimate) to accommodate a change in topic (food, family, religion, sports), addressee (relative, stranger, friend), context (home, church, work, street), and language function (apology, reprimand, suggestion, advice).

Other studies have found that in some bilingual communities, a shift in style can be associated with a shift in dialect (e.g., rural Spanish to formal Spanish) or a switch in language (e.g., English to talk to the boss at work; Spanish to interact with coworkers). Some bilingual speakers may be able to shift from casual to formal to literary styles in English, while in Spanish their repertoire might be more limited, ranging from intimate to casual due to lack of schooling experience in the textbook variety of Spanish. This situation was found by Teschner (1981) among Hispanic students at the University of Texas at El Paso. The written Spanish compositions of these students reflected the style of their colloquial speech due to their lack of familiarity with the standard conventions of Spanish written discourse. Other bilingual speakers, such as some of those described in *Bilingualism in the Barrio* (Fishman, Cooper, & Ma, 1971), may be able to shift from informal to formal style in both Spanish and English.

Distribution of Text Types Across Varieties and Styles

Of particular importance to literacy planners is an understanding of text types in relation to language distribution patterns in the communities to be served by a biliteracy program. Among Hispanics, some text types may be associated with English, others with

Spanish, and still others with both languages. Following Ferguson's (1959) depiction of "high" and "low" varieties in a diglossic language situation, one might find the distribution of text types shown in Table 3 in a given Spanish/English bilingual community.

Table 3
Types of Written Texts Associated with English and Spanish

Written Text Types	English	Spanish	Both
Church bulletins			+
Personal letters		+	
Newspapers	+		
Magazines			+
Business correspondence	+		
TV guides	+		
Visual with texts (novelas with comic illustration)		+	
Warnings/signs			+
Labels	+		

Source: Original

The formal/informal distinction, in terms of both sociolinguistic domain and style, sheds light on the distribution of text types in this table. Spanish seems to be associated with the home domain (personal letters) and the domain of recreation (reading comic books for pleasure), both of which can be regarded as informal. The style in which texts such as personal letters and comic books are written is also informal. English seems to be associated with the domain of work and commerce (business correspondence), as well as with the domain of the mass media (newspapers), both generally formal domains. Business correspondence and newspapers, accordingly, are written in a formal style. The distribution of other text types in the figure does not fit easily into the formal/informal framework, and may have to be explained in terms of some combination of the multiple factors affecting language choice (Grosjean, 1982) listed in Table 1 of this chapter. Also important to consider in understanding

BEST COPY AVAILABLE

the distribution of text types is the *availability* of certain kinds of texts in each language. Questions of choice of language variety and style become moot when some text types are available in one language but not the other.

After Fact Finding: Subsequent Stages of Biliteracy Planning

As we can see from looking at the case of Hispanics in the United States, the patterns of language use among members of an ethnolinguistic minority group in a multilingual setting can be exceedingly complex. In addition to collecting information about such language-use patterns (the fact-finding stage of language planning), it is the job of literacy planners to apply knowledge of these patterns in a sensible way as they proceed with subsequent stages of the biliteracy planning effort. According to Rubin (1973), the subsequent stages of such a language or literacy planning effort would include the following:

Selection Phase: Identify literacy goals, including the role of native language literacy skills in relation to the second language. Specify literacy skills in terms of both individual and societal needs, and suggest strategies for reaching the various goals.

Development Phase: Prepare materials needed for biliteracy instruction, perhaps obtain materials used in other projects, and consider the incorporation of authentic texts as used in different social situations—workplace, health care, social services, and cultural activities. Curriculum planning efforts should take into account research findings on such topics as the development of reading and writing skills among bilinguals, the role of learner differences, differences between oral and written language, and the cognitive processes associated with the various text types.

Implementation Phase: Provide information to the members of the speech community, solicit support from different agencies or groups to disseminate information to the broader community about the literacy goals, and offer an instructional program that centers on the needs of the adult learner.

Evaluation Phase: Examine the degree to which the different literacy goals and objectives have been met; revise, if necessary, making modifications in objectives, teaching methods, and learner/workplace needs.

Types of Literacy to be Developed

Planning for biliteracy involves making decisions about what role different languages and dialects should play in society. In many countries these questions do not arise, because the choices are not open to revision. With regard to the selection stage described above, important questions regarding the types of literacy to be promoted, and in which languages, need to be answered. Educators have recognized three broad categories of literacy: functional, cultural, and critical (Williams & Capizzi Snipper, 1990). These categories may be related to the ability to read text types corresponding to levels of reading proficiency. Table 4, based on the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines, provides a tool for seeing this relationship.

Table 4
Parallel Hierarchies of Text Types and Sample Reading Materials According to Proficiency Levels

Proficiency Level	*Text Type*	*Sample Texts*
0/0+	Enumerative	Numbers, names, street signs, money denominations, office/shop designations, addresses
1	Orientational	Travel and registration forms, plane and train schedules, TV/radio program guides, menus, memos, newspaper headlines, tables of contents, messages
2	Instructive	Ads and labels, newspaper accounts, instructions and directions, short narratives and descriptions, factual reports, formulaic requests on forms, invitations, introductory and concluding paragraphs
3	Evaluative	Editorials, analyses, apologia, certain literary texts, biography with critical interpretation
4	Projective	Critiques of art or theater performances, literary texts, philosophical discourse, technical papers, argumentation

Adapted by permission from Lee and Musumeci, 1988, p. 174.

Functional literacy is usually related to basic writing (encoding) and reading (decoding) simple texts, which corresponds to the enumerative, orientational, and instructive text types shown in Table 4 and described by Child (1987). Cultural literacy encompasses the cultural schemata necessary for fully comprehending texts in the social sense (Level 3 in Table 4). Critical literacy involves an understanding of the ideology of written texts (Level 4). Deciding what texts in what languages are to be produced or comprehended at what literacy levels would correspond to the selection stage of literacy planning.

Importance of Language Attitudes and Learner Motivation to the Success of the Planning Effort

Biliteracy offers some adult learners the possibility of fully living their bicultural lives and participating in literacy events associated with each language that they know. At the same time, higher literacy levels (Levels 3 and 4 in Table 4) may not be possible to the same degree in both languages given the distribution of the two languages in society and the speakers' attitudes toward each variety of each language. Language attitudes not only influence the language use patterns of ethnolinguistic minorities, they also may be a significant obstacle to the success of biliteracy programs if they are ignored or left unchanged by the biliteracy effort.

The attitudes of ethnolinguistic minorities toward different varieties of their mother tongue are especially important in guiding the selection of teaching approaches and materials for mother tongue literacy. Returning to Spanish as an example, Ramirez, Milk, and Sapiens (1985) found that among adolescent Hispanic pupils in Texas and California, attitudes toward four varieties of Spanish (Standard Mexican Spanish, local Spanish, ungrammatical Spanish, and Spanish/English codeswitching) were hierarchical in nature, ranging from standard Spanish (rated most acceptable) to codeswitching (rated least acceptable). These ratings were made with respect to acceptability in the classroom, degree of correctness, and the speaker's academic potential. Judgments about the four varieties were influenced by the language use, location, place of birth, and gender of the rater. Teachers in Texas reacted in a similar way to the four varieties on the basis of a standard language continuum: Standard Spanish was rated higher than the two nonstandard varieties (local and ungrammatical) and codeswitching. The two nonstandard vari-

eties were evaluated more favorably than codeswitching, a common feature of bilingual communication (Ramírez & Milk, 1986). Some approaches to literacy education emphasize reading texts that students have spoken or dictated or that use language reflecting students' spoken dialect. Students holding the language attitudes presented in this example might show little enthusiasm for learning to read and write their own dialect, especially if it includes a large amount of codeswitching. (Editor's note: See Wolfram's chapter for a description of African-American parents' objections to the use of dialect readers in their children's schools.) Of course, language attitudes may change, and it is also possible for effective biliteracy programs to contribute to increasing students' pride in their own dialect.

It is also important for biliteracy planners to consider the role that individual learner motivation plays in language and literacy acquisition. The concept of motivation has been studied closely in relation to language attitudes, especially by researchers studying second language acquisition. Findings on the role of learner motivation in the acquisition of a second language can be applied to the acquisition of mother tongue literacy skills as well as oral proficiency and literacy in a second language in a biliteracy program. Brown (1981) points out that a learner may study a (second) language initially for instrumental purposes (an interest in occupational uses of the language) and later manifest an integrative motivation (a desire to associate with speakers of that language). Brown (1981) has also noted that there are at least three basic types of motivation: (a) global motivation, associated with the general orientation to the goal of learning; (b) situational motivation, which can vary according to the context in which the learning takes place (e.g., in a classroom or naturalistic setting); and (c) task motivation, which corresponds to the motivational drive for performing different learning tasks. Ely (1986), on the other hand, suggests that some learners may have a desire to learn a second language that is not related to either instrumental or integrative motives—as a means of promoting social respect, developing a better understanding of the world, or gaining a well-rounded education.

The relationship between attitudes and motivation is not always clear. Attitudes can be used to refer to the set of beliefs that a learner holds of the community and people who speak the language to be learned. The term can also be used to refer to the language-

learning act itself ("Learning French is interesting/not interesting at all") or the learning task ("I find studying English is dull/exciting; hard/easy"). Some investigators use the term attitudes to refer to motivational tendencies. Others use the concept of motivation for describing course-related attitudes and opinions about specific learning tasks. Given the abstractness of the two concepts and types of relationships that can exist between the two constructs, it is difficult to establish precisely how attitudes and motivation affect language and literacy acquisition. There can be no doubt, however, that both motivation and attitudes are powerful factors that help to determine the level of proficiency attained by different learners (Gardner, 1980; Gardner & Lambert, 1972). Savignon (1976), in fact, believes that attitude is the single most important variable in second language learning. According to Savignon, it may be possible to foster a more favorable language attitude and motivational orientation by the selection of appropriate learning tasks based on the learner's motives, interests, and needs. Clearly, biliteracy planners will need to take learner motivations and language attitudes seriously as they enter the third phase of the planning effort, where decisions regarding oral proficiency or literacy levels in each language will be incorporated into the developing curriculum.

In developing curricula to promote biliteracy, planners may find that ethnographic approaches to literacy study and learner-centered approaches to literacy education provide valuable insights into the ways individuals think about their literacy experiences and needs within a particular community. Cisneros and Leone (1990) describe how, among a group of Mexican-Americans from San Antonio, Texas, it was possible to learn from the individuals themselves (a) their motivations for literacy learning, (b) their strategies for literacy learning, (c) their literacy experiences and needs at work, and (d) their literacy experiences in school. Literacy learners can also pose literacy problems and offer solutions for these problems in the work setting and other domains such as health, housing, education, legal matters, and cultural concerns (Auerbach, 1992; Spener, 1990).

Conclusion

The language planning situation in the United States can be characterized in terms of both linguistic and cultural diversity. The development of biliteracy skills among adults appears to be a complex phenomenon. The various steps used in language planning efforts may prove to be essential in addressing biliteracy issues that are social, political, and psychological in nature. Efforts in planning biliteracy programs for adults can benefit from considering the sociopolitical and linguistic factors that can influence the literacy prospects for the various ethnolinguistic groups in society. Finally, literacy learners themselves can offer valuable insights about their literacy goals, their strategies for literacy acquisition, and the roles that biliteracy plays or could play in their daily lives.

Notes

[1] With regard to Chinese, for example, immigrants from Taiwan are likely to speak Ming-nan; those from Hong Kong typically speak Cantonese; immigrants from the mainland might speak Mandarin if they are from the north or Wu if they are from the south. Ethnic Chinese immigrants from Vietnam might speak any of these or other dialects, depending on their geographic origins within China. While these dialects share a common set of written characters, they differ significantly in vocabulary, phonology, and, to a lesser extent, grammar. See Yuen-ren (1976).

References

American Council on the Teaching of Foreign Languages. (1986). *ACTFL proficiency guidelines*. Hastings-on-Hudson, NY: Author.

Auerbach, E. (1992). *Making meaning, making change: Participatory curriculum development for adult ESL literacy*. Washington, DC and McHenry, IL: Center for Applied Linguistics and Delta Systems.

Brown, H.D. (1981). Affective factors in second language learning. In J.E. Alatis, H.B. Altman, & P.M. Alatis (Eds.), *The second language classroom: Directions for the 1980s* (pp. 113-129). New York and Oxford: Oxford University Press.

Cárdenas, D.N. (1970). *Dominant Spanish dialects spoken in the United States*. Washington, DC: Center for Applied Linguistics. (ERIC Document Reproduction Service No. ED 042 137)

Child, J.R. (1987). Language proficiency levels and the typology of texts. In H. Byrnes & M. Canale (Eds.), *Defining and developing proficiency: Guidelines, implementations and concepts* (pp. 97-106). Lincolnwood, IL: National Textbook.

Cisneros, R., & Leone, E. (1990). Becoming literate: Historias de San Antonio. In J.J. Bergen (Ed.), *Spanish in the United States: Sociolinguistic issues* (pp. 86-109). Washington, DC: Georgetown University Press.

Cooper, R.L. (1984). Language planning, language spread and language change. In C. Kennedy (Ed.), *Language planning and language education* (pp. 17-36). London: George Allen & Unwin.

Craddock, J.R. (1981). New World Spanish. In C.A. Ferguson & S.B. Heath (Eds.), *Language in the USA* (pp. 196-211). New York: Cambridge University Press.

Elías-Olivares, L., & Valdés, G. (1982). Language diversity in Chicano speech communities: Implications for language teaching. In J.A. Fishman & G.D. Keller (Eds.), *Bilingual education for Hispanic students in the United States* (pp. 151-166). New York: Columbia University, Teachers College.

Ely, C.M. (1986). Language learning motivation: A descriptive and causal analysis. *The Modern Language Journal, 70*(1), 28-35.

Ferguson, C.A. (1959). Diglossia. *Word, 15*, 325-40.

Fishman, J.A., Cooper, R.L., & Ma, R. (1971). *Bilingualism in the barrio*. Bloomington: Indiana University Press.

García, R.L. (1982). *Teaching in a pluralistic society*. New York: Harper and Row.

Gardner, R. (1980). On the validity of affective variables in second language acquisition: Conceptual, contextual and statistical considerations. *Language Learning, 30*, 255-270.

Gardner, R.C., & Lambert, W.E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.

Grosjean, F. (1982). *Life with two languages: An introduction to bilingualism*. Cambridge, MA: Harvard University Press.

Lee, J.F., & Musumeci, D. (1988). On hierarchies of reading skills and text types. *Modern Language Journal, 72*(2), 173-187.

Ornstein-Galicia, J.L. (1979). Comparative ethnic factors in bilingual education: The United States and abroad. In R.V. Padilla (Ed.), *Ethnoperspectives in bilingual education research: Bilingual education and public policy in the United States* (pp. 461-482). Ypsilanti, MI: Eastern Michigan University, Bilingual Bicultural Education Programs.

Pedraza, P., Attinasi, J., & Hoffman, G. (1980). Rethinking diglossia. In R.V. Padilla (Ed.), *Ethnoperspectives in bilingual education research: Theory in bilingual education, Vol. II* (pp. 75-97). Ypsilanti, MI: Eastern Michigan University, Bilingual Bicultural Education Programs.

Ramírez, A.G. (1991). Sociolingüística del español-inglés en contacto entre adolescentes hispanos de Estados Unidos. *Hispania, 74*, 1057-1067.

Ramírez, A.G., & Milk, R.D. (1986). Notions of grammaticality among teachers of bilingual pupils. *TESOL Quarterly, 20*, 495-513.

Ramírez, A.G., Milk, R.D., & Sapiens, A. (1985). Intragroup differences and attitudes toward varieties of Spanish among bilingual pupils from California and Texas. *Hispanic Journal of Behavioral Sciences, 5*, 417-429.

Rubin, J. (1973). Language planning: Discussion of some current issues. In J. Rubin & R.W. Shuy (Eds.), *Language planning: Current issues and research* (pp. 1-10). Washington, DC: Georgetown University Press.

Sánchez, R. (1983). *Chicano discourse: Sociohistoric perspectives*. Rowley, MA: Newbury House.

Savignon, S.J. (1976). On the other side of the desk: Teacher attitudes and motivation in second language learning. *Canadian Modern Language Review, 32*, 295-304.

Spener, D. (1990). *The Freirean approach to adult literacy education. ERIC Q&A*. Washington, DC: Center for Applied Linguistics, National Clearinghouse on Literacy Education. (ERIC Document Reproduction Service No. ED 321 615)

Teschner, R.V. (1981). Spanish for native speakers: Evaluating twenty-five Chicano compositions in a first-year course. In G. Valdés, A.G. Lozano, & R. García-Moya (Eds.), *Teaching Spanish to the Hispanic: Bilingual issues, aims, and methods* (pp. 115-139). New York: Teachers College Press.

Williams, J.D., & Capizzi Snipper, G. (1990). *Literacy and bilingualism*. New York: Longman.

Wrigley, H.S. (1991). Language and literacy teachers: Diverse backgrounds, common concerns. *TESOL Adult Education Newsletter, 16*(1), 1, 4.

Yuen-ren, C. (1976). *Aspects of Chinese sociolinguistics: Essays*. Stanford, CA: Stanford University Press.

Zentella, A.C. (1988). The language situation of Puerto Ricans. In S.L. McKay & S.C. Wong (Eds.), *Language diversity: Problem or resource?* (pp. 140-165). New York: Newbury House.

CHAPTER 3
Bidialectal Literacy in the United States

Walt Wolfram
William C. Friday Professor
North Carolina State University

The question of dialect diversity and literacy among native English speakers in the United States represents a unique challenge to those considering the issue of biliteracy, particularly as it compares with the kinds of bilingual situations that are the focus of other papers in this volume. As a straightforward language issue, the question of bidialectal literacy can be reduced to a relatively simple question: Does the spoken language of dialectally divergent groups create a linguistic mismatch that is responsible for creating problems in the acquisition of literacy skills? The correlation of low literacy skills with membership in groups that speak a nonstandard dialect is indisputable, but the question of causation is another matter. In this respect, of course, some of the language issues that relate to the role of dialect differences in literacy contrast clearly with bilingual situations, where relative language *proficiencies* in the mother tongue and second language always have to be a main consideration.

From a broader sociocultural perspective, however, it is indisputable that dialect differences enter the sociolinguistic equation, whether or not there is a significant linguistic mismatch between the language of the speaker and the written language. The stark reality of literacy education in bidialectal situations is that language differences are rarely ignored, and that these differences may strongly influence the perceptions, expectations, and even practical instructional strategies in literacy education. For example, suppose a teacher of literacy skills assumes that a vernacular dialect speaker cannot hope to access the Standard English of written English text without a knowledge of spoken Standard English. As a result of this understanding, literacy education may combine instruction in spoken Stan-

dard English with other literacy skills related to reading and writing. Thus, inordinate amounts of time might be assigned to skills with questionable bearing on the actual acquisition of literacy skills per se.

By the same token, vernacular dialect speakers themselves are likely to be socialized into the American mythology that vernacular dialects are simply unworthy approximations of the standard variety with little linguistic validity in their own right. Given this attitude, they may feel that their "broken" or "corrupted" English precludes them from ever acquiring a full range of literacy skills. Thus, their acquisition of literacy skills is impeded by a self-fulfilling prophecy about their literacy potential. These cases are not far-fetched scenarios; in fact, I believe that there are probably many literacy education encounters that follow these scenarios quite closely, and I have observed some of these cases firsthand.

In the following, I discuss the critical need for an informed perspective on language variation in approaching literacy in a bidialectal context. I approach this first by reliving an old controversy in the language planning of bidialectal literacy—the case of "dialect readers." This case is instructive because it points to some of the broad sociopolitical and sociolinguistic issues that surround bidialectal literacy, particularly as they are similar to and different from the issues surrounding bilingual literacy. At the same time, this case underscores the need for practical information about the nature of language variation for literacy practitioners and vernacular dialect speakers themselves.

It is now two decades since the dialect reader controversy erupted, and yet we still reap the effects of the phobia that it engendered in many educational and popular circles. Applied social dialectologists are still often reminded by an unforgetting and unforgiving educational establishment and general public that a few of us once attempted to convince educators that it was at least worthwhile to experiment with dialect readers to see if they helped incipient readers gain access to the literate world.

The lesson of dialect readers is a worthy one to review here, as it places the issue of bidialectal literacy in its true sociopolitical context. For the record, a so-called dialect reader is a text that incorporates the nonstandard grammatical forms typical of a vernacular-

speaking community. As a brief illustration of how a dialect reader looked, we may compare two versions of the same text, one in Standard English and one in a vernacular dialect.

Standard English Version
"Look down here," said Suzy.
"I can see a girl in here.
That girl looks like me.
Come here and look, David!
Can you see that girl?"

Vernacular Black English Version
Susan say, "Hey, you-all, look down here!"
"I could see a girl in here.
That girl, she look like me.
Come here and look, David!
Could you see the girl?"

(Source: Wolfram & Fasold, 1974, p. 198. Reprinted by permission.)

The second passage is a deliberate attempt to incorporate the features of vernacular dialect into a basal reader—in this case, a primer for children. The aim of such dialect primers, which typically use a standard English orthography rather than a modified, dialect spelling, was never to develop a dualistic reading system as some opponents contended, but simply to use a familiar language system in the initial steps of the reading process. This beginning phase was then to be followed by a transition stage which would lead students into materials written in the standard written variety. Although the use of dialect readers seemed like a radical departure from traditional approaches and materials in reading, this was not the only example of specially adapted reading materials designed for the incipient stages of developmental reading. The use of a special, invariant phonetic alphabet such as the Initial Teaching Alphabet for teaching initial decoding skills certainly departed to some extent from traditional reading primers. So we can conclude that it was not the specially adapted materials themselves that were at the heart of the matter, but the nature of the materials.

Although other kinds of alternative strategies in teaching reading may have engendered some debate as well, the controversy over dialect readers still stands in a class of its own. There seem to be several major reasons for this controversy. One involves the deliberate use of socially stigmatized language forms in written material.

BEST COPY AVAILABLE

This tactic is viewed by some as a reinforcement of nonstandard dialect patterns, and thus it flies in the face of traditional mainstream institutional values endorsing standard dialects. After all, educational tolerance of socially stigmatized forms in spoken language is in itself a significant departure from a tradition committed to stamping out such forms; to confront them in written text designed to teach people how to read was simply too much. The potential readers for whom the materials were designed found these stigmatized forms objectionable as well, even when these forms were shown to be in common use in their everyday language. For example, N.H. Stokes (personal communication, April 16, 1990), using a cloze passage technique, showed that beginning readers tended to substitute standard forms in reading even when such forms were not regularly used in their spoken style.

It is quite clear that vernacular dialects have been defined in our society as inappropriate vehicles for literacy, and it is apparent that children are socialized regarding this functional differentiation from the onset of their socialization regarding literacy. In this respect, the U.S. situation is akin to some third-world situations, in which unwritten minority languages are considered inappropriate for literacy vis-a-vis official state languages even when knowledge of the official language is minimal or nonexistent.

Another reason that these dialect primers were considered so objectionable was that this approach singled out particular groups of readers for special materials—namely, those who spoke vernacular dialects. In this case, it was Vernacular Black English speakers. This selective process was viewed as patronizing—and ultimately racist and classist—educational differentiation. This may have been unfortunate and even unfair, but the perception could not be denied. In fact, targeting particular materials for special dialect groups was considered so patronizingly offensive that one mother declared that she would rather not have her child learn how to read at all than to learn to read such unsightly language (reported to the author by William A. Stewart, personal communication).

A Sociolinguistic Perspective

From the viewpoint of educational sociolinguistics, the use of dialect readers is based on three assumptions: (a) that there is a sufficient mismatch between a potential reader's linguistic system

and the Standard English text to warrant distinct materials, (b) that the benefits from reading success will outweigh any negative connotations associated with the use of a socially stigmatized variety, and (c) that the use of vernacular dialects in reading will promote reading success.

From the standpoint of simple linguistic processing, it is reasonable to hypothesize that the greater the mismatch between the spoken and written word, the greater the likelihood of processing difficulties in reading. But the real issue is whether dialect differences are great enough to become a significant barrier to linguistic processing. At this point, there still remain no carefully designed experimental studies that have examined this important research question in the United States in detail, but several observations are germane to this issue. First of all, there is some indication that vernacular dialect speakers do have receptive capability to process most spoken Standard English utterances whether or not they use this variety productively. Although receptive and productive capability in language may not transfer to the reading process in the same way, we would certainly expect considerable carryover from this receptive capability in spoken Standard English to the reading process, which is itself a receptive language activity.

Writing, a productive process, may be more transparently influenced by dialect divergence, and a number of different studies have documented the influence of spoken language differences on writing (Farr & Janda, 1985; Whiteman, 1981; Wolfram & Whiteman, 1971). Even with the productive medium of writing, however, it should be noted that the influence of spoken language is not isomorphic. Generalized strategies affecting both Standard English and vernacular dialect speakers account for some types of divergence, and not all predicted influence from spoken vernacular dialects is realized for various sociolinguistic reasons, so that the picture of written language divergence for vernacular speakers is somewhat more complicated than we might expect at first glance (Farr & Daniels, 1986; Farr & Janda, 1985; Whiteman, 1981).

It is, of course, erroneous to assume that Standard English speakers confront written language that is identical to the way they speak, and vernacular speakers do not. In reality, all readers encounter written text that differs from spoken language to some extent. Even in early reading, sentences with an adverbial complement moved to

the beginning of the sentence (e.g., Over and over rolled the ball; Up the hill he ran) represent a written genre that differentiates written from spoken language for all speakers. So the problem of mismatch between written and spoken language is a matter of degree rather than kind. [Editor's note: See also Ramirez, this volume, for a discussion of the need to take style and register variation into account in literacy planning.]

Admittedly, the gap between written and spoken language is greater for vernacular dialect speakers than it is for speakers of standard varieties. But is this gap wide enough to cause problems on the basis of linguistic differences alone? Again, carefully controlled experimentation on this issue is lacking, although I am reminded of the fact that there are situations in the world where the gap between spoken dialect and written text is quite extensive without resulting in significant reading problems. In northern Switzerland, for example, texts are written in standard German although much of the population speaks Swiss German, yet the Swiss population does not reveal significant reading failure. Although it is difficult to measure "degree of dialect difference" in a precise way, Swiss German is certainly as different from standard written German as many vernacular dialects of English are from standard written English (Fishman, 1969, p. 1109). Pointing to linguistic mismatch as a primary variable in reading failure among vernacular speakers thus seems suspect. As we shall see, differences in the written and spoken language may have to be taken into account by an aware reading instructor, but it is doubtful that the neutralization of these differences in reading material would alleviate the reading problems associated with various vernacular-speaking populations. Given children's socialization into mainstream attitudes and values about dialects at an early age, there is also little reason to assume that the psychosocial benefits of using a vernacular dialect would outweigh the disadvantages. In fact, the opposite seems to be the case, as children reject nonstandard forms in reading, and parents and community leaders rail against their use in dialect readers. A positive relationship between reading success and the use of vernacular dialect readers also has not been firmly established. Some initial investigation of dialect readers reported slight gains for children given these materials (Leaverton, 1973), but substantive research in favor of dialect readers is lacking. Due to the continuing controversy surrounding the use of dialect primers, this alternative now has been largely abandoned.

To say that dialect readers do not hold promise does not, however, suggest that the representation of dialect can never be used advantageously in literacy. In fact, there is a sustainable vernacular language literature which may have merit in its own right. Vernacular dialects are written in two main contexts. One is dialogue sequences in novels and short stories, where the dialect captures the indigenous community character of the speaker. In fact, it would be quite unreal and inappropriate for writers to represent speakers from these communities in any other way, and these passages make speakers authentic representatives of their communities. Another literate tradition for vernacular dialects is the poetry of well known and respected African-American writers who selectively write poetry in the community vernacular. Writers such as Langston Hughes, Paul Laurence Dunbar, and Maya Angelou all use this technique to great advantage. In fact, Paul Laurence Dunbar wrote approximately one-third of his poetry in vernacular dialect. Consider, for example, the following portion of a poem by Dunbar (1941, p. 60):

DISCOVERED

Seen you down at chu'ch las' night,
  Nevah min', Miss Lucy.
What I mean? oh, dat's all right,
  Nevah min', Miss Lucy.
You was sma't es sma't could be,
But you could n't hide f'om me.
Ain't I got two eyes to see!
  Nevah min', Miss Lucy.

Guess you thought you's awful keen;
  Nevah min', Miss Lucy.
Evahthing you done, I seen;
  Nevah min', Miss Lucy.
Seen him tek yo' ahm jes' so,
When he got outside de do'—
Oh, I know dat man's yo' beau!
  Nevah min', Miss Lucy.

It is important to note that these writers coupled the selective use of verse written in vernacular dialect with standard English, showing their bidialectal facility. Vernacular verse seems to be contextualized as a "literature of the heart." As Fasold (1990) notes,

the literature of Vernacular Black English may have a place, but "its use is circumscribed and the settings considered appropriate have been quite consistent at least the past half century or so" (p. 3).

In retrospect, then, one of the major problems of dialect readers was their sociolinguistic insensitivity to the appropriate setting for the use of African-American dialect. As it turns out there is a reading curriculum that uses a version of dialect materials, namely, *Bridge: A Cross-Cultural Reading Program* (Simpkins, Simpkins, & Holt, 1977). This program is not designed for beginning readers but for older junior high and high school students who have experienced reading difficulty. The program limits the dialect text to passages representative of students' cultural background experiences so that the use of vernacular is placed in an appropriate community context. It also makes a sincere effort to provide positive motivation and successful reading experiences for students as the major component of the program. While this program has hardly been free of controversy, its limitation of dialect passages to culturally appropriate contexts has made it less offensive than other approaches which use dialect passages without regard for their culturally appropriate setting. By contextualizing dialect use in reading so that it fits into appropriate cultural contexts, these materials have avoided a major flaw of some of the decontextualized dialect primers. In fact, in many respects, the use of dialect passages in the *Bridge* program falls in line with a well established, fairly secure tradition of representing dialect in literature. In this instance, the intent is to seize upon this literary tradition of dialect representation for the benefit of a reader who may identify with the dialect rather than the representation of a dialect assumed to be different from that of the reader. Rigorous measurement of the outcomes of this program has not been undertaken, but its authors claim that it is an approach to reading that capitalizes in a more positive, appropriate way on the use of a literate vernacular dialect. So, the selective literary uses of vernacular dialect in literacy programs may not be completely dead, after all.

Since the 1970s, a number of approaches to literacy education have come into vogue that build literacy skills using students' own spoken language as a starting point. The language experience approach comes to mind in particular. In the language experience approach, stories dictated by learners themselves are used as reading texts. These dictated stories are not typically corrected by in-

structors on the premise that keeping the discrepancy between written language and student speech to a minimum fosters reading success in the early stages of acquiring literacy. (See, e.g., Davidson & Wheat, 1989; Richardson, 1981; Rigg & Taylor, 1979; Taylor, in press). Dialogue journals are another tool being promoted by some educators as a way to develop writing proficiency in particular. (See e.g., Peyton & Staton, 1990.) In dialogue journals, students write to their teachers or to other partners about topics of personal interest to them, and the partners write back. As the writing continues back and forth, an ongoing dialogue develops. The focus of dialogue journals is on the content of the messages exchanged, not their form, and student language use is not subject to teacher correction. Thus, while dialogue journals may not actively promote the reading and writing of vernacular dialects, they do offer a nonjudgmental context for the use of vernacular dialects encoded into writing. Finally, whole language approaches to literacy emphasize the importance of readers being able to select which texts they are going to read and write. One of the important roles of literacy educators in the whole language approach is to provide learners with a rich and diverse print environment that includes texts written in a variety of styles and dialects. (See, e.g., Newman, 1985; Rigg & Kazemek, 1985, in press.)

Applying Sociolinguistic Knowledge to the Current Situation

Although there are some ways in which dialect may affect reading, most current approaches to literacy for vernacular dialect speakers play down simple linguistic differences as a primary factor in the high levels of reading failure found among vernacular-speaking populations. Instead, cultural values about reading (Labov, 1972), the technological conditions for reading instruction (Dreeban & Gamoran, 1986), the process of socialization into the social activity of reading, the mismatch between readers' interests and the content of reading material, and interactional dynamics during reading instruction (Washington & Miller-Jones, 1989) have been considered more essential factors in accounting for high failure rates among nonmainstream populations (see also García, Jiménez, & Pearson, 1989). Focus on these other variables does not, however, excuse those involved in providing literacy for such populations from understanding the ways in which dialectal differences may impact on the reading process and from taking these factors into consideration

in instruction. This was, in fact, the major point of the much heralded Ann Arbor Decision (Center for Applied Linguistics, 1979), where it was decreed that educators had a responsibility to take into account sociolinguistic differences in their teaching of reading.

A Perspective on Language Variation for Practitioners

First of all, it seems to be essential for those involved in literacy on all levels to understand the kinds of reading processes that may be affected by dialect differences. (For more detail, see Farr & Daniels, 1986; Wolfram & Christian, 1989). For example, one process in reading that may be affected by dialect is *decoding*. Whereas different approaches to reading rely on decoding skills to varying degrees, and many current approaches deemphasize a basic decoding model of reading, the systematic sounding out of letters still appears to be a skill that readers should be familiar with.

A literacy worker engaged in decoding tasks with students must recognize that there are systematic differences in the symbol-sound relationships from dialect to dialect. For example, consider how a reader of a vernacular dialect might decode orally the passage "There won't be anything to do until he finds out if he can go without taking John's brother." A modified orthography is used below to indicate the pronunciation differences for the vernacular speaker.

> Deuh won't be anything to do until he fin' out if he can go wifout takin' John_ broyuh.

Systematic decoding differences may affect a number of symbol-sound relationships in the example, such as the final consonant of find, the th of without, the th and final r of brother, and so forth. These differences are no more severe than variant regional decodings of the vowel au of caught (e.g., [ɔ] or [a]) or the s of greasy (e.g., [s] or [z]), except that they involve a couple of heavily stigmatized variants. The variant decoding becomes a problem only if an instructor does not recognize dialectally appropriate sound-symbol relationships and classifies these differences as errors in decoding. Imagine the confusion that might be created for a dialect speaker if an accurate dialect decoding such as th —> [f] in without or th —> [v] in brother is treated as a problem comparable to the miscoding of b as [d] or sh as [s]. To avoid this confusion and potential misdiagnosis of reading problems, literacy practitioners need to be able to sepa-

rate dialect differences from actual reading disabilities. The potential impact of dialects on the decoding process can be minimized if reading instructors have this information.

It is also important to recognize that dialect differences may lead to reading miscues that derive from grammatical differences, as indicated in the following vernacular dialect rendering of the passage given above.

> It won't be nothing to do till he find_ out can he go without taking John_ brother.

The use of existential it for there, multiple negation, the absence of inflectional -s, and the inverted question order of can he go are all instances of mismatch between the spoken vernacular variety and the written word. Given the potential for dialect influence in processing written text, it seems imperative that literacy instructors familiarize themselves with the linguistic structure of vernacular varieties.

Similar application can be made to the writing process, where spoken vernacular dialect features may influence the written form. It is not difficult to document cases of vernacular spoken language influence on the writing process similar to those cited for reading above. However, as Whiteman (1981) and Farr and Janda (1985) point out, dialect features are not reflective of spoken language in a simple isomorphic relationship. We need to appeal to general developmental principles with respect to the writing process (e.g., inflectional suffixes may be omitted) and to principles related to the social evaluation of language (e.g., highly stigmatized, stereotyped features are less likely to be used in writing) to account for the observed patterning of dialect features in the written language of vernacular dialect speakers.

The preceding paragraphs point to a need for literacy practitioners to know something about the structural details of the dialects of their vernacular-dialect-speaking clientele in order to distinguish genuine language processing difficulties from dialectally appropriate renditions. This discussion also suggests that information about the social evaluation of forms needs to be acquired as a basis for understanding the nature of dialect manifestations in reading and writing, since different forms may be expected to manifest themselves at different points in the progression of literacy skills.

Another area of language variation to consider in the reading process involves the broader sociolinguistic base of language, including background cultural differences. In most current models of the reading process, the application of background knowledge is essential for comprehension. Readers need such background in order to derive meaning by inference; they may also need to apply knowledge about the world in order to process some of the literal content. For example, imagine the differences in how a third grader from California and one from New York City might interpret the following passage on the age of giant redwood trees. Incidently, this item appeared in the *Metropolitan Achievement Test*.

> They are so big that roads are built through their trunks. By counting the rings inside the tree trunk, one can tell the age of the tree. (Meier, 1973, p. 15)

Meier (1973) reports that some readers in New York conjured up fairy tale interpretations of this passage that included, among other things, pictures of golden rings lying inside trees. The fairy tale interpretation was certainly fostered by images of cars driving through giant holes in trees. On the other hand, those who live near the Redwood Forest in California would interpret the passage quite differently, since its literal content would match their knowledge of the world. There is certainly the potential for students to expand their range of experience through reading, but background information is critical for comprehension, and the reality of real-world differences in experiential backgrounds must be confronted as part of the consideration of the broader sociolinguistic setting of reading. Different community language and culture experiences may, in fact, actually affect reading comprehension in both obvious and subtle, yet important ways.

In the above paragraph, we see a need for literacy practitioners to know more than simply the structural details of vernacular speaking communities. Their knowledge of language variation must include the broader base of cultural background and experience that vernacular dialect speakers bring to the literacy situation.

Finally, we need to remember that dialect differences may have an effect on some of the metalinguistic tasks often associated with literacy skills. Beginning-level reading assessment measures are particularly susceptible to the impact of dialect because they often rely on metalinguistic tasks that are sensitive to dialect-specific decoding

differences. For example, the use of minimal-word-pair tasks or rhyming tasks to measure decoding skills might result in misclassifying cases of dialect-appropriate symbol-sound relationships as incorrect responses. Consider test items (taken from an actual reading achievement test) that include the following word pairs as part of an attempt to determine early readers' specific decoding abilities.

Choose the words that sound the same:
pin/pen
reef/wreath
find/fine
their/there
here/hear

For speakers of some vernacular varieties, all of these items might legitimately sound the same. The "correct" response, however, would be limited to there/their and hear/here, based upon the Northern standard dialect norm. An informed perspective on language variation must therefore consider the ways in which literacy skills are measured, including narrowly based metalinguistic skills and broader based inferencing that bring background knowledge into play in the acquisition of literacy skills.

Language Variation for Vernacular Dialect Speakers

We have seen that there are several types of fundamental knowledge about language variation that are essential for literacy practitioners to acquire to adequately serve the vernacular-speaking community. But what about the speakers themselves who are acquiring literacy skills? Is there a need for them to know something about the nature of language variation? I would maintain that it is also essential for those acquiring literacy skills to be exposed to some fundamental notions about language variation. We must remember that speakers of vernacular dialects, like mainstream dialect speakers, have been socialized into the American prejudice against nonstandard dialects. Operating on erroneous assumptions about language differences, it is easy for these learners to feel that since "they can't talk right," they can't learn literacy skills either. Such learners need to know that dialect divergence is natural and neutral linguistically, that the linguistic discrimination and prejudice they have been subjected to is unjustified, and that their own dialect is systematically patterned with a linguistic history as viable as any other variety. The

honest, open discussion of language prejudice, a brief examination of the legitimate history of the vernacular dialect, and even an examination of the development of several exemplary structures may well be worth the time and effort in terms of moving learners to a less shameful view of their dialect. For example, showing the video *American Tongues* (available through the Center for New American Media, 524 Broadway, 2nd floor, New York, NY 10012-4408) or the *Black on White* program from McNeil's *Story of English* series (available through Films Incorporated, 5547 N. Ravenwood, Chicago, IL 60640-1199) tends to get adult literacy students to talk much more openly and honestly about the unjustified prejudices about Vernacular Black English and to confront its legitimate history. Even a brief discussion of the relationship of the current-day aks pronunciation in Vernacular Black English to the older, mainstream English form (axian) from which it was derived can help learners view their own dialect in a less shameful light. In this context, exposing readers to some of the vernacular dialect verse of prominent African-American writers might provide tacit support for the legitimacy of the dialect. Since we hypothesize that speakers who feel good about the way they speak are more likely to take the kinds of learning risks needed to acquire literacy skills than those who feel shameful about their spoken language, we may reason that there is an important educational benefit to be derived from the introduction of such material apart from our moral conviction to provide accurate information about dialects.

I have accumulated several enthusiastic testimonials from adult literacy programs about the benefits of such information for learners, both in terms of the atmosphere surrounding the context of literacy instruction and the learners' willingness to engage in literacy instructional encounters. While this evidence is still anecdotal, it offers a reasonable working hypothesis to guide those who teach literacy skills to vernacular dialect speakers. Even if it doesn't prove beneficial when examined within the framework of a tightly controlled experimental design, we can be assured that people are ultimately better off knowing the truth about dialects. This goes for specialists in social dialectology, literacy practitioners, and vernacular dialect speakers acquiring basic literacy skills.

Language Variation for ESL Students

As perplexing as language variation sometimes is for native speakers of English, it is even more mystifying for students of English as a second language (ESL). The standard version of English provided in most ESL curricula aims unrealistically at a dialect-neutral variety of English identified as General American Standard. And yet the majority of ESL learners are surrounded by a rich variety of dialects, including vernacular dialects of English for those who live in economically impoverished conditions. It is not surprising for speakers living in these communities to report that, while they comprehend the neutral variety of English they are taught in the ESL classroom, they cannot comprehend the vernacular dialects surrounding them.

Along the way, many ESL learners' socialization in American culture may lead them to adopt the same uncharitable, biased opinion of vernaculars as that so often found among native speakers of English. Furthermore, many ESL learners may, in fact, speak vernacular varieties of their native languages that are comparable in status to the vernacular dialects of English. It thus seems appropriate to incorporate dimensions of language variation into the ESL curriculum so that such learners may share in the full, realistic range of language variation as offered ideally to their native-English-speaking peers. In fact, the absence of a sociolinguistic perspective in most ESL programs robs them of their full educational potential. Theoretically, it deprives students of an honest understanding of the nature of language variation—a perspective that can lead to an authentic sociolinguistic appreciation for the natural basis of variation in both their native and their second language. Practically, it deprives students of the benefits of learning about everyday English—the real-world varieties of English that they will actually face in their everyday sociolinguistic interaction. In the real world, sociolinguistic success is determined by the ability to carry out everyday affairs with a wide range of English speakers—speakers who speak different dialects, including vernacular ones. ESL programs have much to gain from adopting a curriculum that includes a healthy understanding of language variation.

Despite the obvious correlation between low levels of literacy and membership in a vernacular-speaking dialect group, there does not appear to be substantive evidence for concluding that dialect per se is a major variable in explaining this relationship between

illiteracy and speaking a vernacular dialect. At the same time, however, this fact does not let literacy practitioners off the language variation hook. I have stressed that there are several reasons why knowledge of language variation is critical for such practitioners, as knowledge about dialect differences affects numerous activities related to literacy, including the interpretation of reading behavior, teaching procedures, metalinguistic activities related to literacy, and attitudes about those who do not speak standard varieties of English. In addition, I have suggested that vernacular dialect speakers themselves have nothing to lose and much to gain from exposure to some basic, fundamental notions about language variation.

References

Center for Applied Linguistics. (1979). *The Ann Arbor decision: Memorandum, opinion, and order and the educational plan*. Washington, DC: Author.

Davidson, J.L., & Wheat, T.E. (1989). Successful literacy experiences for adult illiterates. *Journal of Reading, 32*, 342-346.

Dreeban, R., & Gamoran, A. (1986). Race, instruction, and learning. *American Sociological Review, 51*, 660-669.

Dunbar, P.L. (1941). *The complete poems of Paul Laurence Dunbar*. New York: Dodd, Mead, and Company.

Farr, M., & Daniels, H. (1986). *Language diversity and writing instruction*. Urbana, IL: National Council of Teachers of English.

Farr, M., & Janda, M.A. (1985). Basic writing students: Investigating oral and written language. *Research in the Teaching of English, 19*(1), 62-85.

Fasold, R.W. (1990). *Sustainable vernacular language literacy illustrated by U.S. Vernacular Black English*. Unpublished manuscript, Georgetown University, Washington.

Fishman, J. (1969). Literacy and the language barrier [Review of *Teaching black children to read*]. *Science, 165*, 1108-1109.

García, G.E., Jiménez, R.T., & Pearson, P.D. (1989). *Annotated bibliography of research related to reading of at risk children* (Tech. Rep. No. 482). Urbana, IL: Center for the Study of Reading.

Labov, W. (1972). The relation of reading failure to peer-group status. In W. Labov (Ed.), *Language in the inner city: Studies in the Black English Vernacular* (pp. 241-254). Philadelphia: University of Pennsylvania.

Leaverton, L. (1973). Dialect readers: Rationale, use, and value. In J.L. Laffey & R.W. Shuy (Eds.), *Language differences: Do they interfere?* Newark, DE: International Reading Association.

Meier, D. (1973). *Reading failure and the tests*. New York: The Workshop Center for Open Education.

Newman, J. (Ed.). (1985). *Whole language: Theory in use*. Portsmouth, NH: Heinemann.

Peyton, J., & Staton, J. (Eds.). (1990). *Writing our lives: Reflections on dialogue journal writing with adults learning English*. Englewood Cliffs, NJ and Washington, DC: Regents Prentice Hall and Center for Applied Linguistics.

Richardson, J.S. (1981). Language experience for adult beginning readers: Sometimes it works. *Lifelong Learning: The Adult Years, 4*(8), 12-13.

Rigg, P., & Kazemek, F. (1985). For adults only: Reading materials for adult literacy students. *Journal of Reading, 28*, 726-731.

Rigg, P., & Kazemek, F. (1993). Whole language in adult literacy instruction. In J.A. Crandall & J.K. Peyton (Eds.), *Approaches to adult ESL literacy instruction* (pp. 35-46). Washington, DC and McHenry, IL: Center for Applied Linguistics and Delta Systems.

Rigg, P., & Taylor, L. (1979). A twenty-one-year-old begins to read. *English Journal, 68*(3), 52-56.

Simpkins, G.C., Simpkins, C., & Holt, G. (1977). *Bridge: A cross-cultural reading program*. Boston: Houghton Mifflin.

Taylor, M. (1993). The language experience approach. In J.A. Crandall & J.K. Peyton (Eds.), *Approaches to adult ESL literacy instruction* (pp. 47-58). Washington, DC and McHenry, IL: Center for Applied Linguistics and Delta Systems.

Washington, V.M., & Miller-Jones, D. (1989). Teacher interaction with nonstandard English speakers during reading instruction. *Contemporary Educational Psychology, 14*, 280-312.

Whiteman, M.F. (1981). Dialect influence in writing. In M.F. Whiteman (Ed.), *Writing: The nature, development, and teaching of written communication: Vol. 1* (pp.153-165). Hillsdale, NJ: Erlbaum.

Wolfram, W., & Christian, D. (1989). *Dialects and education: Issues and answers*. Englewood Cliffs, NJ and Washington, DC: Prentice Hall Regents and Center for Applied Linguistics.

Wolfram, W., & Fasold, R.W. (1974). *The study of social dialects in American English*. Englewood Cliffs, NJ: Prentice Hall.

Wolfram, W., & Whiteman, M. (1971). The role of dialect interference in composition. *The Florida FL Reporter, 9*, 34-38.

CHAPTER 4

Biliteracy in the Home: Practices Among *Mexicano* Families in Chicago

Marcia Farr
University of Illinois, Chicago

Many scholars have struggled in recent years to define precisely what literacy is. Clearly literacy cannot be reduced to one definition (Graff, 1986, 1987); "a plurality of literacies" (Szwed, 1981, p. 16) more accurately reflects literacy practices that vary from context to context. Definitions of literacy, then, range rather widely, but usually cluster around two concepts: One is referred to as functional (or basic) literacy and the other as essayist (often meaning text-level) literacy (Olson, 1977; Scollon & Scollon, 1981). Heath (1987) has suggested the terms *literacy skills* and *literate behaviors* to refer to the cognitive and linguistic processes behind these two general conceptions of literacy. Distinguishing literacy skills (the encoding and decoding of a writing system, or basic reading and writing) from literate behaviors (using problem-solving and knowledge-creating abilities) may have clarified some problems in defining literacy, particularly in providing terms for common conceptions of literacy, but it has led to other problems.

Ethnographic research on literacy among particular groups of people (Heath, 1983; Scribner & Cole, 1981; Shuman, 1986; Street, 1984; Tannen, 1982) has countered effectively the earlier assertion of some scholars that literacy and orality represented an essential dichotomy (Olson, 1977; Ong, 1982), and that entire groups of people, even in complex literate societies, had oral cultures and thus were unable to think abstractly (Farrell, 1983). Ethnographic research on literacy has shown clearly that oral and written language (in societies that use a writing system) overlap in subtle ways and are often used within the same communication event. Recently,

however, some have taken this finding even further and have argued that literacy can be an entirely oral activity; that is, rather than using oral language to discuss or otherwise converse about a piece of print (Heath, 1983), some have argued that literacy can mean using oral language in ways that are considered literate without involving any print at all (Gee, 1989; Vasquez, 1989).

One problem with this view is that it doesn't allow for distinctions between languages or cultures with no writing system (i.e., nonliterate societies) and those with writing. It has been argued with both historical and ethnographic evidence that, over time, writing does make a difference in cultures (Goody, 1986, 1987a), although it does not represent the "great leap" that was originally claimed by some scholars (Goody & Watt, 1963; Olson, 1977; Ong, 1982). Finnegan (1988), in a careful synthesis of anthropological work that bears on the orality-literacy debate, concludes that the invention of writing acts as an enabling factor, which, along with other social factors (e.g., the development of paper from trees), can stimulate significant changes in a culture.

Ultimately, one arena in which change may occur is in the use of oral language as feedback from literacy to oral language (Goody, 1987b); thus, the oral language of those who are immersed in written texts begins to resemble the written language of their culture. Because of this feedback, some oral language use can be quite literate in the sense that it reflects characteristics of literate traditions of a particular culture. In my view, however, this phenomenon doesn't justify claiming that using solely oral language (e.g., in the construction of personal narratives) is a literacy activity, even though it may involve, for example, some analytic thinking. Finnegan's (1988) synthesis provides abundant evidence that nonliterate peoples engage in the kinds of thinking that in our culture are termed literate, but they do not do so with writing. To say, then, that what these peoples, or other groups, do solely with oral language constitutes a kind of literacy, eliminates this distinction between literate and nonliterate societies. We then would have to claim that the invention of writing in various cultures around the world was relatively insignificant in human history. Clearly, although no great leap, writing is not an insignificant development, primarily because of its ability to extend communication over space and time.

Undoubtedly, something very important is at stake when so much energy is spent on—and such controversy surrounds—defining a phenomenon such as literacy. What is at stake here are the political implications of various definitions. Depending on the definition, entire groups of people can be labeled illiterate. For example, if literacy is defined as using higher order critical thinking (i.e., analytic logic and other abstract cognitive processes) in written language, then those who use written language only in functional ways (i.e., to function pragmatically in daily life) can be said to be illiterate.

In fact, recent research has shown that relatively few adults in the United States can be said to be *non*literate (Kirsch & Jungeblut, 1986), although those who use literacy skills but, supposedly, not literate behaviors (at least not with writing), have been termed semiliterate (Miller, 1988). In this way, the economic problems of the so-called underclass, or of the working classes more generally, can be seen as their own problem; members of these groups are not literate enough to perform jobs that would yield them more money. Wilson (1987), however, has shown that the economic problems of what he termed the underclass (and has revised to "the ghetto poor") are the result of structural changes in the economy, not group or individual factors. Moreover, some research has shown that literacy often is used to screen potential employees, even when it is not actually needed on the job (Levine, 1986). Thus it does not seem to be clear that, even if everyone were fully literate, everyone could be fully employed.

Workforce 2000 (Johnson & Packer, 1987), a report of the U.S. Department of Labor, claims that there soon will be numerous jobs, but that many people will not have the skills (including literacy—or perhaps the cognitive style associated with literate behaviors) to perform these jobs. This claim is based on an expectation that jobs in an increasingly automated workplace will require new kinds of abilities and skills. As increasing numbers of women and minorities are entering the workforce, it is apparently these groups in particular who may need further training. Researchers may be skeptical, as I am, about these predictions, but we have limited evidence about the actual uses of literacy in a variety of work situations with which to argue with those who make the claims.

What do we actually know of the role of literacy in the workplace? This question is central to the controversy over how literacy is defined, since defining literacy will affect what kinds of literacy are taught in school, and one (though not the only) justification for a particular kind of literacy instruction is that it prepares students for the workplace. Reviews of work in this area have indicated that:

- Literacy demands can vary greatly from one place of work to another.
- Many blue as well as white collar jobs involve almost daily literacy activity.
- Much of this literacy activity (especially for blue collar work) involves the filling out of forms.
- More research is needed in a variety of settings to determine the range of variation in the level of literacy from one place of work to another and to provide an in-depth view of writing processes, functions, and social contexts (Jacob, 1982; Mikulecky, 1982).

In my own ethnographic research with Mexican-origin families in Chicago, I have found the demand for literacy at work to vary widely. In some of the jobs family members hold, no literacy is required at all (e.g., in a poultry processing plant where a workforce of virtually all Mexican women debone, weigh, and pack chicken breasts and other parts), whereas in others, women with as few as two years of formal schooling in Mexico, in Spanish, are struggling to write reports in English as part of a quality control process in a factory. As researchers have noted, people in such jobs often perform beyond their apparent level of literacy skills (Cintron, 1989; Crandall, 1981; Diehl & Mikulecky, 1980), using contextual information to complete tasks that they probably would be unable to complete under experimental, out-of-context conditions.

It is not totally clear, then, what role(s) literacy plays, or doesn't play, in all settings across the workplace domain. While initial work in this area has shown literacy activity to be involved in many jobs, we need more in-depth, on-site ethnographic studies to describe workplace literacy activity more fully and, importantly, to compare employer and employee perceptions of this activity (Gundlach, Farr, & Cook-Gumperz, 1989). Finally, we have insufficient generalizable evidence at this point to determine conclusively how important

literacy is in the employability of people, although we do know that this seems to vary greatly from context to context, even within the same job level in the same industry (Jacob, 1982).

Our knowledge gaps, in addition to the variation in literacy activity researchers already have found, thus lend limited clarity to the controversy over how literacy should be defined, or whose literacy should provide the model for this definition. Graff (1981) has pointed out, however, that only functional literacy skills can be considered universal, since what people do with these skills varies from culture to culture and throughout history. Also, functional literacy may be the most widely and frequently used by many segments of the population in this country, whether or not essayist literacy is used as well by some of them. Virtually everyone has to deal with forms (i.e., the literacy of bureaucratic institutions) in one aspect or another of their lives, whether at work or at home. The teaching of essayist literacy, in both oral and written activities at school, then becomes a separate question, justified not just on economic, but on civic—including political—grounds. My working definition of literacy, then, like Graff's, is that of Heath's literacy skills: communication which involves encoding (writing) or decoding (reading) with a writing system. My choice of functional literacy as the working definition of literacy itself is supported by the fact that this definition generally reflects the view of literacy held by the Mexican families with whom I have been working. That is, the members of these families generally view literacy as the decoding and encoding of language with a writing system, in this case either the Spanish or English alphabet.[1]

The Mexican-Origin Language and Literacy Project[2]

The Mexican-origin Language and Literacy Project at the University of Illinois, Chicago has as its overall goal the description of oral and written language patterns in the Mexican-origin community of Chicago. Our preliminary work in the two (contiguous) most concentrated Mexican-origin neighborhoods in Chicago indicated at least three major subgroups in this community: *mexicanos* (immigrants raised in Mexico), Mexican-Americans raised in Chicago (who generally prefer the terms Mexican or Mexican-American to Chicano), and Mexican-Americans raised in Texas (who often refer to themselves as *tejanos*). The first phase of this project has investigated language and literacy among *mexicanos* in this community (Elias-Olivares,

1990; Farr, 1989, in press; Guerra, 1991). We hope that future studies will provide a closer look at the two groups of Mexican-Americans.

For several years I have participated in the lives of families within one social network of *mexicanos* in the heart of the Mexican-origin community in Chicago. A social network, a conceptual tool of anthropology (see review in Hannerz, 1980), is comprised of one center person or one center family and all immediate kin and close friends. In methodological terms, a researcher starts by getting to know the center person or family and works his or her way out to the other people or families close to the center. For Mexicans this involves both kin and *compadrazco* (godparent-like) relationships, and the network itself, like the family, is of central importance in all facets of social life. Approximately 11 families (about 75 people) comprise the inner circle of this particular network, and, in keeping with the gender-based activity patterns of these culturally conservative families, my participant-observation has been primarily, but by no means exclusively, with the women and children. I am continuing to gather data on the literacy practices in both Spanish and English of these families and on female verbal performances, in all-female contexts, of jokes, stories, and arguments (what I am calling "oral folk texts").

This work is being carried out within the framework of the ethnography of communication as conceptualized by Hymes (1974) and as extended by Hymes (1981) and Bauman (1977). Within this framework, speaking and reading and writing are viewed as ways of communicating that are characteristic of a particular cultural group; context is crucial to the interpretation of behavior; and linguistic behavior is inextricably connected to and reflective of social meaning. Thus the women's jokes, for example, reflect social meanings to insiders of the group, and it is only through long-term participant-observation that an outsider can discern these meanings.

In this chapter I will provide a partial description of the literacy practices of the families in whose lives I have participated. In analyzing my data, I have chosen to focus on domains in which literacy is used, rather than the functions of each literacy activity, as have other researchers (Heath, 1984; Taylor & Dorsey-Gaines, 1988), because so many literacy activities serve multiple functions. For example, a particular use of written Spanish or English (e.g., reading a letter from a government agency) may serve both instrumental and

social-interactional functions. In contrast, viewing literacy activities as occurring in broad domains within the lives of family members allowed a more social, and less individual, perspective on my data.

In focusing on domains, I adapted a framework provided by Goody (1986), which synthesizes anthropological and historical studies of writing in societies all over the world. Goody posits four large domains ("along the lines of the frequently accepted subsystems of society," p. xvi) in which writing has been central historically: religion, economy, politics (the state), and law. The families I am studying, like many families living in the United States, regularly interact with print issued from large institutions in these four domains: the church, commerce, the state, and the law.

As Goody points out, these domains can and often do overlap, and for the purposes of my analysis I collapsed two of his domains: those of the state and the law. I did so because the recent U.S. amnesty process for undocumented workers, in which these families participated, essentially combined the interests of these two domains, and the written forms encountered and responded to during this process represented both the state and the law. In addition, however, my data show literacy practices in these families extending beyond Goody's four societal domains; thus in my analysis I have added to his framework two additional domains: that of education (both large institutional and personal) and that of the family/home (as the only private, rather than public, institution). My revision of Goody's framework, then, results in a description of literacy practices among Mexican immigrant families within five primary domains: the church, commerce, the state/the law, education, and family/home.

Particularly relevant to the concerns of this book is the domain of family/home, especially in light of current policy concerns: Not only is this domain the only one of the five that is exclusively private (education as a domain includes both private/informal and public/formal activities, and the three remaining domains—the church, commerce, and the state/the law—entirely represent public institutions), but there is much contemporary controversy over whether or not, and if so, how government agencies should intervene in family literacy practices, given that it is a private domain (Auberbach, 1989; Szwed, 1981). Elsewhere (Farr, in press), I provide a fuller description of all five domains, representing both public and private institutions.

Family Literacy Practices

During the first 1½ years of fieldwork, literacy practices seemed to us minimal and infrequent, possibly because these activities were not made evident to us by participants themselves, but were inconspicuously interwoven with daily activities. Another reason that the literacy activities of these families seemed so minimal to us was the fact that literacy materials are generally stored away, out of sight. Magazines, for example, are kept neatly inside the compartments below the top of the coffee table in the living room; they are brought out only when they are to be used. A complete set of hardback religious books is also stored away, for example, up in a cupboard in a back bedroom. Finally, all meaningful papers (certificates, records, and other papers seen as important) are stored in a special place like the parents' bedroom, in either a box, a valise, or a bag. It is worth noting that many papers seen as important enough to be stored away by members of these families seemed to me unimportant (e.g., receipts from telephone calls placed to or from Mexico through commercial long distance offices); it may be that virtually all pieces of writing are viewed as potentially having importance (and the amnesty provisions of the 1986 Immigration Reform and Control Act may have proven these families right).

In spite of the surface invisibility of literacy artifacts, however, a recent computer search through my field notes from the first year of the project revealed a very different picture from that of our initial impression. Theme words involving literacy occurred continuously throughout the field notes; the following list should indicate the regular presence of literacy in the lives of these families:

read/reading	map
write/writing/written/wrote	library
draw	literate/literacy
copy/copied	form(s), application(s)
list, note	contract(s)
print	certificate(s), record(s)
telegram, mail, letter(s)	advertisement
bill(s), receipt(s)	worksheet
invitation(s)	homework, study(ing), test
page, word(s), paper(s)	checking account
book(let), TV guide, magazine	sign(ature)
catalogue	*doctrina*/catechism

Literacy activities are woven into the ongoing stream of family life. Print, in both Spanish and English, is omnipresent both within the neighborhood and within homes. Outside, in the neighborhood, stores display a multitude of signs primarily in Spanish (e.g., *Discolandia* for a music store, *Abarrotes* for a grocery store), less frequently in English (e.g., McDonald's—although there are both English and Spanish menus inside on the wall behind the counter), and sometimes in both languages together (e.g., a bar that advertises *Tenemos Via Satellite* to indicate they have cable television). Within homes, print also abounds in both Spanish and English:

- Labels on cans of food—usually in English, but in Spanish on items imported from Mexico.
- Wall calendars—same type as in Mexico, and in Spanish.
- Audiotapes—the music is usually Mexican or Mexican-American, so the packaging print is usually in Spanish.
- Magazines—either religious or with a focus on health and beauty for women, and usually in Spanish; *TV Guide* is the exception in English.
- Newspapers—the *Chicago Sun Times* in English and *La Raza* and *El Diario*, local weeklies, in Spanish.
- Invitations printed especially for a formal event (and addressed and signed by hand), usually at the church—to baptisms; *quinceañeras*, which celebrate daughters turning 15; or special masses and parties that celebrate major birthdays such as the 50th.
- Letters—personal ones to and from Mexico are in Spanish; official ones from government agencies are usually in English, although deportation notices are printed in both languages; other official letters, e.g., from a school, are in Spanish or both languages.
- Documents, certificates, and other records—in both Spanish and English, depending primarily upon country of origin, Mexico or the United States.
- Books—those children use for their schoolwork (which are in English and Spanish, depending on whether the child is in bilingual education or in English-only classes) and those that are religious in nature, either for catechism class or more general purposes.

- Television—because the families have cable television, three of the several dozen channels are entirely in Spanish, so when print is displayed on the screen, which it frequently is, it is in Spanish as well.

In short, there is an abundance of print in the home environment, and much of it is in Spanish. This is not surprising, since these are immigrant families in which the parents were raised in Mexico; literacy artifacts printed in English are more common in the homes where there are other family members, especially teenagers or young adults, who are fluent in English (having been raised, if not born, in Chicago).

As should be clear from the above list, there is substantial literacy activity within the family/home domain in these Mexican families. Much of this activity is similar to that found in studies of other populations: rural working-class white and black families, as well as black and white middle-class townspeople in the southeast (Heath, 1983); white middle-class families in the northeast (Taylor, 1983); and black inner-city families in the northeast (Taylor & Dorsey-Gaines, 1988). I haven't, however, observed frequent literacy activity in the realm of literature (fiction and nonfiction books and poetry) that Taylor and Dorsey-Gaines (1988) describe among the inner-city black families they studied, or the reading and joint discussion of newspaper and other printed items that Heath (1983) describes for the rural black families she studied.

Within the Mexican families I have come to know, literacy is not viewed as something to be taken for granted, something that children will acquire naturally, in contrast to what Taylor (1983) found with her white, middle-class families (and, possibly, as can be inferred from the studies of black families by Heath and by Taylor and Dorsey-Gaines). Taylor's white, middle-class families, like those studied by Gundlach, McLane, Stott, and McNamee (1985), were even playful with literacy in their interactions with their children because they assumed all of their children would become literate, and it was not something they, the parents, needed to work on. While this no doubt doesn't characterize all middle-class parents (e.g., there are those who are so anxious about their children learning to read or write that it causes problems for the children in doing so), many working-class parents, depending on the state of schools in their neighborhoods, cannot take literacy for granted at all. McLane and

McNamee (1990), in fact, describe black inner-city mothers in Chicago who explicitly teach literacy skills to their children in an attempt to ensure that they become literate, with or without the public school.

Similarly, I have observed Mexican parents explicitly teaching literacy skills to their children. In one case, a mother held her youngest child (about 4 years old) on her lap, grasped his hand in hers, and carefully guided him in making the letters of the alphabet, one by one. Like the parents in Delgado-Gaitán's study (1989), these parents provide strong support for, and belief in, formal education, insisting children do homework before watching television or playing with other children. They also assist with the homework when they can, especially if it is in Spanish, from a child's bilingual education program. Another mother regularly insists that her children practice their multiplication tables, especially when I arrive, at which times she directs them to do whatever lesson I teach them. Clearly (being a *maestra*, or teacher), I am a resource that this mother doesn't want to waste. To oblige, I improvise writing lessons on the spot and do the best with mathematics that I can.

Although literacy is not always accompanied by schooling (Farr, 1989, in press; Scribner & Cole, 1981; Taylor & Dorsey-Gaines, 1988), it is generally seen in these Mexican families as connected to schooling; even those who learned it informally, or *liricamente*,[5] outside of school insist that it must be taught explicitly. It is not something one can learn oneself; one needs to learn from someone else who already knows the writing system, that is, the letters of the alphabet—usually someone who has learned them in school. Both literacy and schooling, then, are taken seriously and as something that cannot be taken for granted as developing in the natural course of events. In many of the lives of the adults in this network, schooling and literacy were privileges not afforded to everyone.

An illustration of the high regard these network members have for schooling was revealed during the first amnesty class we held in one family's home. (In exchange for their participation in our research, we offered to help them through the amnesty process.) I was struck by how serious and earnest everyone was; in a flurry of ardent activity, extra chairs were brought into the living room and lined up in rows, pencils were located and sharpened, notebooks readied, children quieted, and expectant faces turned toward the

maestros. Most surprising to me was that everyone participated, including children of all ages, in spite of the fact that only the adults would undergo the amnesty process. Moreover, other adults in the network sometimes participated in our weekly class, even when they already had green cards. The message was clear: Schooling was very important, and one should use every opportunity to learn what one could.

Many of these adults had little opportunity during their childhoods in Mexico to go to school, often attending only a few years. Most of the older adult members (in their 30s and 40s), in fact, have had fewer than 5 or 6 years of formal schooling, all of which were in Mexico, in Spanish. A number of the middle-aged men from one particular village in Mexico had almost no formal schooling, yet are functionally literate in their current lives because they learned how to write outside of school, after migrating to the United States, in order to write letters back home (Farr, 1989, in press). Many of the younger adults (in their 20s) finished *secundaria* in Mexico (the equivalent of U.S. middle school); a common view in these families is that one doesn't go on to *preparatoria* (the equivalent of U.S. high school) unless one intends to go on to college or to a specific career.

Although these individuals would be counted in this country as dropouts because they have not graduated from the equivalent of U.S. high school, it is clear to me that they don't consider themselves dropouts. Moreover, their education has prepared them to meet many of the literacy demands in their lives, and network members more proficient in literacy help those who are less proficient with more demanding literacy tasks. Literacy, like other resources (e.g., knowledge of automobile repair or of health remedies) is shared. Other studies of Mexican social networks (Horowitz, 1983; Velez-Ibañez & Greenberg, 1989) have found a similarly extensive sharing of resources. Within these Chicago families, those who are more literate tend to be those who have had more schooling, and those who have had more schooling tend to be younger. The youngest generation (those in their teens and younger), having been raised almost entirely in Chicago, are finishing high school here, and some of them are going on to college or other schools. Proficiency in literacy, then, is primarily a matter of childhood opportunity, with a clear trend toward more literacy across the generations in these families.

Even the older adults in the network, regardless of the level of schooling they were able to reach, indicate a great deal of interest in some written texts. During a month I spent in the Mexican state of Michoacán with some of the family members on the *ranchos*[1] where they were born or grew up, I shared books I had located at El Colegio de Michoacán, nearby in Zamora. Many network members showed intense interest in two books in particular: *Más Allá de los Caminos: Los Rancheros del Potrero de Herrera* (*Far Beyond the Roads: The Rancheros of Potrero of Herrera*) by Esteban Barragán López (1990), and *La Villa de Tingüindín de Arganda*r (*The Village of Tingüindín of Argandar*) by Ramón Pardo Pulido (1957).

The former, *Más Allá de los Caminos*, was recognized by some network members who had heard of it before. It is a study of *ranchos* in a nearby, more isolated area (the local *tierra caliente*, a hotter and drier region than their own, which is closer to the cooler sierra area of Michoacán, as well as closer to paved roads). One woman, in fact, pointed out the author (currently on the faculty at El Colegio de Michoacán) in one of the photographs in the book, saying he had grown up in one of the *ranchos* he studied. Another network member was so excited about the book that he began reading it immediately and finally agreed to my suggestion that he keep it awhile, to read at his leisure. When I left the *rancho* a week or so later, he offered to return the book to me, but I declined, having bought another copy for myself. Now my second copy is in demand by yet other families in the network; clearly, I could have given many copies of this book to interested people. Later I was told by various people that it was "an important book" because it had many important things to say about the people of the *tierra caliente*, who are reputed to be very tough *rancheros* (small landowners).

The second book that stirred great interest among network members was a local history of the municipality (Tingüindín) and its nearby *ranchos*, including their own. Before I located this book, one man had told me a story that had been handed down in his family about their ancestors from Spain; when I told him of the book, he asked for it (and for his daughter to get his reading glasses) and began reading immediately. I waited 45 minutes that evening at the kitchen table with him while he read. At one point he called my attention to a passage in the book that contained his family name, seeming to corroborate his family's story. Subsequently, there was

so much interest in this book as well (I was unable to obtain another copy, as it is out of print) that I photocopied the entire book before leaving the *rancho*. Upon returning to Chicago, I encountered yet more interest in this book, like the other one.

Conclusion

In this chapter I have reviewed briefly the controversy surrounding the definition of literacy, a complex matter since literacy varies so from context to context. I also have discussed what is known about workplace literacy (not enough) in light of how it might inform attempts to define literacy. I have argued that the controversy over definition stems from the political implications inherent in any attempts at definition, concluding that it seems more sensible at this time to use the only universal definition of literacy, knowledge and use of a writing system, as a working definition. My own choice in doing so is further supported by the fact that this is the conception of literacy generally held by the members of the social network of Mexican families with whom I have been working.

These families, especially as a social network, have considerable expertise with literacy. They routinely handle literacy demands from a variety of domains in their lives. In this chapter I have provided descriptions of their literacy practices in one of these domains, that of the family/home. In the other four domains (church, commerce, the state, and the law), large public institutions that require the use of a writing system for their very existence regularly provide additional literacy demands—the church in a variety of religious events; factories and other businesses where network members work; large corporations (e.g., Tupperware), which sustain network members' small businesses; and finally, government agencies like the Immigration and Naturalization Service (INS) and the Internal Revenue Service (IRS).

Families in this network cope very well with the literacy demands confronting them, in spite of the fact that virtually all adult members have less than a high school education. Their preparation in literacy, from relatively scant formal schooling, has nonetheless enabled them to participate in modern urban life. From their point of view, life in Chicago may have its drawbacks (it's awfully cold in the winter, for one thing), but they are making more money here than they currently could in Mexico, and their lives are materially better than they would have been had they not migrated.

To say, however, that these family members are functioning well with the literacy demands in their lives is not to say that there is no interest among them in becoming more literate, that is, in reading or writing more extended texts and becoming more proficient and fluent with literacy, as is evident in their intense interest in the books I shared with them. Literacy programs that attempt to build on the interests of learners clearly could be effective with members of these families.

A number of scholars have worked to broaden traditional education, for both adults and children, by using information gathered (often through ethnographic research) in community and home contexts (Auberbach, 1989; Heath, 1983; Moll & Diaz, 1987; among others). Undoubtedly, these kinds of approaches would be appropriate and welcomed by the network members with whom I have been working, since they would encourage already expressed interest in literate texts particularly relevant to their lives.

A word of caution, however, is in order. First, a group's own perceptions of phenomena such as literacy cannot be ignored if a literacy program is to be effective. In this case, network members share a perception of literacy as something apart, as something generally linked to formal schooling, as a technology to learn for use in their own lives. This runs counter to many descriptions of literacy in the research literature, which focus on its humanistic, creative, or consciousness-raising aspects (e.g., Freire, 1973; Taylor & Dorsey-Gaines, 1988; Walsh, 1990). Such descriptions, in fact, parallel those used in other research literatures (e.g., literary criticism, ethnography of communication, even psychotherapy) as characteristic of human language itself, either oral or written. None of these descriptions, however (in a laudable attempt to avoid the restrictions of a limited skills-centered approach to literacy instruction), allow for an alternative conception of literacy as a valuable cultural technology (Coulmas, 1989; Sampson, 1985). Neither view of literacy, either as cultural technology or as humanistic discourse, is sufficient alone; rather, both are necessary for a fully adequate understanding of what literacy is and what it means to people.

A second caution involves an aspect of education that is troubling to many researchers: literacy instruction as a cultural invasion (Delgado-Gaitán, 1989). This danger is presumed to be avoided with an emphasis on Freirean dialogue with learners, a dialogue that draws out the life concerns of learners and organizes literacy learning around

these concerns. True dialogue can be egalitarian, but, as Stotsky (1991) has argued, sometimes a teacher's political zeal can replace true dialogue with political consciousness raising along the lines of the teacher's beliefs. When this happens, it is cultural invasion as surely as when school discourse and linguistic practices are imposed on people (although in both cases resistance exists as well). Even in true dialogue, however, in which learning and change occur, a kind of cultural invasion transpires. That is, education involves change, and developing new ways of thinking, reading, and writing within a group is a significant change, one that by definition is culturally embedded. As long as we teach essayist literacy, then, we cannot avoid a type of cultural invasion (see Scollon & Scollon, 1981 for a clear explication of this point).

Nonetheless, if it is the learners' (or their parents') choice that such new linguistic and cognitive ways be learned, then, whether or not others believe—and argue quite convincingly—that these choices are constrained by external, structural factors, those choices should be respected. Not to respect them leads to a patronizing stance that certainly undermines the principle of true dialogue and can undercut effective learning as well (Gundlach, 1991).

As Walsh (1990) has pointed out, much of the rhetoric in the contemporary "literacy crisis" is, in fact, patronizing, at times even forthrightly denigrating. This rhetoric labels Mexican immigrants, among others, as illiterate even when they demonstrate functional literacy skills. Why should such people be deemed illiterate or even semiliterate because they don't read or write extended text in their (scant) leisure time, or for a living? They use literacy, and they use the critical thinking processes that people all over the world use, whether or not their languages have a writing system. They think critically in oral language, and they do so when dealing with the functional literacy demands of large institutions. The question is not whether a particular group of people can think (all human beings do); the question is whether or not they do a specific kind of thinking with written language that is characteristic of one discourse strand of Western civilization (Farr, 1993).

I would argue that most of the members of this social network don't currently practice such essayist literacy because it makes no sense in their lives to do so. There are exceptions, of course, in the younger generation, who are going to high school, college, and

even graduate school; for these members of the network, practicing academic literacy does make sense in their lives. Those continuing beyond high school are making a choice for themselves, and academic literacy is a part of that choice. For most of the adults, however, there is little time in their hard-working lives for the reading of novels or for attendance in classes at night for long periods of time.

To call people semiliterate because they are doing what it makes sense to do in their own lives is to privilege a particular kind of literacy—essayist literacy. On the other hand, to define literacy so as to include oral language activities in totally nonliterate peoples makes no sense at all. I would argue, instead, that we (i.e., literacy researchers) use the only common definition of literacy that endures across cultures and throughout history—knowledge and use of a writing system—and grant that anyone who knows and uses written language adequately in their own lives is literate. This means, of course, that we must give up a (felt) position of superiority, either one of arrogance (we are fully literate; others are less so) or one that is patronizing (everyone is literate, either in oral or written language; or, we are literate and must save those who are not). A stance that seems to me to be more truly egalitarian allows for differences, for example, between literate and *non*literate, or among different kinds of literacy, like essayist and "form-filling" literacy, without privileging one kind as being superior in all contexts for all people. The literacy practices of the families I have come to know are neither to be pitied nor exalted; they are quite simply the active and energetic responses of a very resourceful group of people to the demands of a changing and challenging world. As Dinerman (1982) has noted:

> I regard rural agriculturalists and their decisions as neither politically ineffective nor inconsequential to the interests and decisions of more powerful groups. The decision of millions of persons from Mexico to migrate to the United States and to destinations within Mexico has forced these more powerful groups in both societies to take account of them. If it is true that peasants vote with their feet, and that their number now makes a deafening din, then in the broadest sense migration has surely become a political action. (p. 120)

Notes

[1] Many of the parents have remarked to me on various occasions that literacy is "easier" in Spanish than in English, since the Spanish alphabet matches spoken sounds more closely than English letters do; that is, you really can sound out printed words fairly accurately. In addition, I have observed both adults and children sounding out printed words in Spanish, syllable by syllable. In one incident, a young boy won an argument with his cousin over the writing of someone's name (and other words) because the cousin had left out crucial sounds, and thus letters.

[2] My colleague, Lucia Elías-Olivares, and I are grateful to the National Science Foundation, Linguistics Program, for providing a grant to support the first 1½ years of this study. Juan Guerra, a Ph.D. student of mine, worked as a co-ethnographer with us during that time. I am also grateful to the Spencer Foundation for providing a grant to fund another 2 years of the study through August 1992.

[3] The concept of "lyrical" learning (learning informally, orally, without books, about practical things) is shared throughout this social network and by their friends and relatives with whom I talked in Michoacan and Guanajuato. Farr (in press) discusses it more fully.

[4] I am very grateful to Gail Mummert and others at El Colegio de Michoacán for suggesting references to recent and ongoing studies of the region and for help in locating census data and a history of the area from which the social network discussed in this chapter originated.

References

Auberbach, E. (1989). Toward a social-contextual approach to family literacy. *Harvard Educational Review*, 59(2), 165-181.

Barragán Lopez, E. (1990). *Más allá de los caminos: Los rancheros del Potrero de Herrera*. Zamora, Michoacan, Mexico: El Colegio de Michoacán.

Bauman, R. (1977). *Verbal art as performance*. Prospect Heights, IL: Waveland.

Cintron, R. (1989). *Striving for literacy: Oral and written language acquisition among some mexicano families*. Unpublished doctoral dissertation, University of Illinois, Chicago.

Coulmas, F. (1989). *The writing systems of the world*. Cambridge, MA: Basil Blackwell.

Crandall, J. (1981). *A sociolinguistic investigation of the literacy demands of clerical workers*. Unpublished doctoral dissertation, Georgetown University, Washington, DC.

Delgado-Gaitán, C. (1989). Mexican adult literacy: New directions for immigrants. In S. Goldman & H. Trueba (Eds.), *Becoming literate in English as a second language* (pp. 9-32). Norwood, NJ: Ablex.

Diehl, W., & Mikulecky, L. (1980). The nature of reading at work. *Journal of Reading, 24*, 221-228.

Dinerman, I. (1982). *Migrants and stay-at-homes: A comparative study of rural migration from Michoacán, México*. La Jolla, CA: Center for U.S.-Mexican Studies.

Elías-Olivares, L. (1990, August). *Hablar con sinceridad: Variedad discursiva del español méxico-americano*. Paper presented at the international conference of ALFAL, Campinas, Brazil.

Farr, M. (1989, November). *Learning literacy lyrically: Informal education among mexicanos in Chicago*. Paper presented at the annual meeting of the American Anthropological Association, Washington, DC. (ERIC Document Reproduction Service No. ED 321 598)

Farr, M. (1993). Essayist literacy and other verbal performances. *Written Communication, 10*(1), 4-38.

Farr, M. (in press). *En los dos idiomas*: Literacy practices of *mexicano* families in Chicago. In B. Moss (Ed.), *Literacy across communities*. Cresskill, NJ: Hampton.

Farrell, T.J. (1983). IQ and standard English. *College Composition and Communication, 34*, 470-484.

Finnegan, R. (1988). *Literacy and orality*. New York: Blackwell.

Freire, P. (1973). *Education for critical consciousness*. New York: Continuum.

Gee, J. (1989). *What is literacy?* (Tech. Rep. No. 2). Cambridge, MA: Education Development Center, The Literacies Institute.

Goody, J. (1986). *The logic of writing and the organization of society*. New York: Cambridge University Press.

Goody, J. (1987a). *The domestication of the savage mind*. Cambridge: Cambridge University Press.

Goody, J. (1987b). *The interface of the written and the oral*. New York: Cambridge University Press.

Goody, J., & Watt, I. (1963). The consequences of literacy. *Comparative Studies in Society and History*, 5(3), 304-345.

Graff, H.J. (Ed.). (1981). *Literacy and social development in the West*. New York: Cambridge University Press.

Graff, H.J. (1986). *The legacies of literacy: Continuities and contradictions in Western culture and society*. Bloomington: Indiana University Press.

Graff, H.J. (1987). *The labyrinths of literacy: Reflections on literacy past and present*. London: Falmer.

Guerra, J. (1991). *The literacy practices of an extended Mexican immigrant family*. Unpublished doctoral dissertation, University of Illinois, Chicago.

Gundlach, R. (1991). What it means to be literate. In R. Beach, J. Green, M. Kamil, & T. Shanahan (Eds.), *Multidisciplinary perspectives on literacy research* (pp.365-372). Urbana, IL: National Council of Teachers of English.

Gundlach, R., Farr, M., & Cook-Gumperz, J. (1989). Writing and reading in the community. In A. Dyson (Ed.), *Writing and reading: Collaboration in the classroom?* (pp. 91-130). Urbana, IL: National Council of Teachers of English.

Gundlach, R., McLane, J., Stott, F., & McNamee, G. (1985). The social foundations of children's early writing development. In M. Farr (Ed.), *Advances in writing research: Children's early writing development* (pp. 1-58). Norwood, NJ: Ablex.

Hannerz, U. (1980). *Exploring the city: Inquiries toward an urban anthropology*. New York: Columbia University Press.

Heath, S.B. (1983). *Ways with words: Language, life and work in communities and classrooms*. New York: Cambridge University Press.

Heath, S.B. (1987). Foreword. In H. Graff, *Labyrinths of literacy* (pp. vii-ix). New York: Cambridge University Press.

Horowitz, R. (1983). *Honor and the American dream: Culture and identity in a Chicano community*. New Brunswick, NJ: Rutgers University Press.

Hymes, D. (1974). *Foundations in sociolinguistics*. Philadelphia: University of Pennsylvania Press.

Hymes, D. (1981). *In vain I tried to tell you: Essays in Native American ethnopoetics*. Philadelphia: University of Pennsylvania Press.

Jacob, E. (1982). Research on practical writing in business and industry. In L. Gentry (Ed.). *Research and instruction in practical writing* (pp. 37-50). Los Alamitos, CA: SWRL Educational Research and Development.

Johnson, W.E., & Packer, A.H. (1987). *Workforce 2000: Work and workers for the 21st century*. Indianapolis: Henson Institute.

Kirsch, I.S., & Jungeblut, A. (1986). *Literacy: Profiles of America's young adults*. Princeton, NJ: Educational Testing Service, National Assessment of Education Progress.

Levine, K. (1986). *The social context of literacy*. London: Routledge and Kegan Paul.

McLane, J., & McNamee, G. (1990). *Early literacy*. Cambridge, MA: Harvard University Press.

Mikulecky, L. (1982). Functional writing in the workplace. In L. Gentry (Ed.), *Research and instruction in practical writing* (pp. 51-72). Los Alamitos, CA: SWRL Educational Research and Development.

Miller, G. (1988). The challenge of universal literacy. *Science, 241*, 1293-1299.

Moll, L., & Diaz, S. (1987). Teaching writing as communication: The use of ethnographic findings in classroom practice. In D. Bloome (Ed.), *Literacy, language, and schooling* (pp. 193-221). Norwood, NJ: Ablex.

Olson, D. (1977). From utterance to text: The bias of language in speech and writing. *Harvard Educational Review, 47*, 257-281.

Ong, W.J. (1982). *Orality and literacy*. New York: Methuen.

Pardo Pulido, R. (1957). *La villa de Tingüindin de Argandar*. Zamora, Michoacán, México: Ramirus Vargas Cacho.

Sampson, G. (1985). *Writing systems: A linguistic introduction*. Stanford, CA: Stanford University Press.

Scollon, R., & Scollon, S.B. (1981). *Narrative, literacy and face in interethnic communication*. Norwood, NJ: Ablex.

Scribner, S., & Cole, M. (1981). *The psychology of literacy*. Cambridge, MA: Harvard University Press.

Shuman, A. (1986). *Storytelling rights: The uses of oral and written texts by urban adolescents*. New York: Cambridge University Press.

Stotsky, S. (1991). On literacy anthologies and adult education: A critical perspective. *College English, 52*, 916-923.

Street, B. (1984). *Literacy in theory and practice*. New York: Cambridge University Press.

Szwed, J. (1981). The ethnography of literacy. In M. Farr Whiteman (Ed.), *Variation in writing: Functional and linguistic-cultural differences* (pp. 13-23). Hillsdale, NJ: Erlbaum.

Tannen, D. (Ed.). (1982). *Spoken and written language: Exploring orality and literacy*. Norwood, NJ: Ablex.

Taylor, D. (1983). *Family literacy: Young children learning to read and write*. Portsmouth, NH: Heinemann.

Taylor, D., & Dorsey-Gaines, C. (1988). *Growing up literate: Learning from inner-city families*. Portsmouth, NH: Heinemann.

Vasquez, O. (1989). *Connecting oral language strategies to literacy: Ethnographic study among four Mexican immigrant families*. Unpublished doctoral dissertation, Stanford University, Stanford, CA.

Velez-Ibañez, C., & Greenberg, J. (1989, November). *Formation and transformation of funds of knowledge among U.S. Mexican households in the context of the borderlands*. Paper presented at the annual meeting of the American Anthropological Association, Washington, DC.

Walsh, C. (1990). Preface. In C. Walsh (Ed.), *Literacy as praxis: Culture, language, and pedagogy* (pp. 1-22). Norwood, NJ: Ablex.

Wilson, W.J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.

CHAPTER 5

Literacy and Second Language Learners: A Family Agenda

Gail Weinstein-Shr
San Francisco State University

Imagine this scenario. There is a people's revolution. Academics are all forced to leave the United States with our families. Somehow, we end up in Laos. Glad for our lives, we take what we can get. The only work available is in the lowland rice farms. Our academic training has not prepared us well. Because of flabby upper arms and inexperience, we plant slowly and get very low wages. We can only hope that things will get better when we learn some Lao, so we can get better jobs.

I imagine my daughter Hannah going to school. Of course, Lao is the language of instruction. There are times when she doesn't understand the school assignment. Neither do I. After long outdoor days, I am lucky to have a slot in overcrowded adult classes for LEP (limited-Lao-proficient) adults, where I learn the essential vocabulary of farm implements. Hannah hangs out with some Lao kids. She wants to fit in. Soon she talks to me in Lao. She teases that she doesn't understand English anymore.

What would I want for Hannah, for my husband, and for me in this new life? How could my adult classes and Hannah's school classes contribute to making that new life? What would any of us want? This paper is an attempt to explore that question.

I am grateful to the tutors and students at Project LEIF, through whom I learned about how the world looks through other eyes. And hugs to Hannah, who helped me learn about family issues in the first person.

Defining the Problem of School Perspective

Experience

> *I feel so bad for these kids. The parents don't come to parent-teacher conferences. I've never seen any at open house either. I don't think they really try to help the kids with school. I wonder—maybe in their culture, education isn't as important.*
>
> (secondary school teacher in refugee concerns discussion group, TESOL, 1989)

The teacher quoted above does not know very much about the families or the communities of the children in her classroom. She only knows that they are poor. She does not have the time, she feels, or the adequate means to find out more.

> *I visit them (the Cambodians) in their homes. I explain why it's important for them to come. I even call them the night before to remind them. "Yes," they say. "I'm coming." Then, next morning, I wait, no one comes. So I call them.*
>
> (U. Thiem, personal communication)

Thiem knows quite a bit about the families of the children she teaches. She is a native speaker of Khmer. Her commitment to helping Cambodian children succeed is reflected in the long hours she puts in and in her persistent (though often fruitless) efforts to convince parents to come to the school for parent events. Teachers and administrators are frustrated. The solution, it seems, is to help these parents to get involved and to provide them with the skills they need to do the kinds of things that the parents of successful school achievers do.

Research

The evidence is convincing. Educational research from several domains indicates the importance of parents in the school achievement of their children. Scholars of emergent literacy point to evidence that conceptual development happens during the earliest years in life (Teale & Sulzby, 1986), leading to emphasis on parents as the first teacher. Children's achievement in school has been demonstrated to be directly correlated with the mother's level of education (Sticht, 1988). In addition, it is clear that parent behaviors, such as ways of "scaffolding" or constructing conversations, ways of talking

about pictures in books, ways of telling bedtime stories, and other ways of interacting around print, are important factors in predicting children's school achievement (Heath, 1982).

The impact of parents and home environment has also been a recent focus of scholars interested in language minority children. Attempts to understand school achievement have focused on early literacy and language at home (Cochran-Smith, 1984) and on other school-home differences (Cummins, 1981; Moll & Diaz, 1987). Results of these studies have been aimed at helping educators understand differences in order to sensitize teachers and to facilitate academic learning.

Practice

"Family literacy" is the response in practice for working with parents to improve the school achievement of children. Among the new intitiatives are the Barabara Bush Family Literacy Foundation, the Even Start Legislation, and the Family English Literacy Program of the Office of Bilingual Education and Minority Languages Affairs, which funds family literacy programs around the country.

One set of goals for family and intergenerational programs has been improving the school achievement of children by promoting parental involvement in their children's education. Programs aimed primarily at increasing parental involvement are constituted by activities that encourage or teach parents (a) to provide a home environment that supports children's learning needs; (b) to volunteer in the schools as aides or in other roles; (c) to monitor children's progress and communicate with school personnel; and (d) to tutor children at home to reinforce work done in school (Simich-Dudgeon, 1986).

A second set of goals often found in family literacy programs is "to improve skills, attitudes, values, and behaviors linked to reading" (Nickse, 1990, p. 5). Models that aim at these goals are often made up of a variety of reading activities. Some of these may involve teaching parents to imitate behaviors that occur in the homes of successful readers, such as reading aloud to children and asking them specific types of questions as they read. Parents of young children may practice in adult groups on books that they may then read to their children. This approach is possible for parents of very young children, who have some hope of learning enough English to be able to keep linguistically one step ahead of their children.

The Social Context of Literacy: Literacy and Everyday Lives

Over the past five years, I have had the opportunity to learn about the lives and the concerns of refugees and immigrants in Philadelphia through Project LEIF, Learning English through Intergenerational Friendship,[1] and more recently through work in the Cambodian community in western Massachusetts. The concerns of adults I have spoken with revolve around three themes: survival, communication, and power.

Survival

> *Soldiers come we run always run. I have my baby inside. I run. Baby come out I can't rest. My family we bear guns. I run with baby. When we not run baby dead. Five my children die from Khmer Rouge in my country.*
>
> (as told to literacy tutor, a project LEIF tutor, 1990)

The stories of the Hmong, Khmer, and Vietnamese that I know reveal a common characteristic: These people are survivors. The families we have worked with made it here despite unbelievable odds, and they continue to use their survival resources to manage in difficult conditions with limited resources. The families we know have been ingenious in their strategies for dealing with problems.

Families divide the language and literacy labor. In one Cambodian home, the kids read the English mail, the mother reads Khmer letters aloud to the family, and the eldest daughter, who was able to get her license, has become the family driver. In several homes, every phone call is answered by two people—an adult native language speaker and a younger English speaker. The superfluous interlocutor then hangs up.

Adults without a history of literacy or of schooling have come up with some very creative strategies for supporting their children's education. Poor Khmer farmers in Cambodia often sacrificed their most valued resource by selling a parcel of their own farmland to send one child to school (Samien Nol, Director of the Cambodian Association of Philadelphia, personal communication). Likewise, in Philadelphia, many adults miss their own language classes to earn money from seasonal blueberry picking, but rarely pull their children from school for the same purpose (Andrew Atzert, Project LEIF tutor, personal communication). One Hmong family has separate hooks on the walls for their children's book bags and a study table

in the common room that automatically gets priority for use for homework. The father attends clan meetings in Nebraska to discuss, among other things, strategies for supporting children's school success. One decision, for example, was for clan elders (most of whom are not themselves literate) in cities across the country to throw a party in which all children of the clan were given a quarter for every "A" received (Weinstein-Shr, 1992).

Our experience at Project LEIF confirms the research of others that refugees are excellent problem solvers. Like the native speakers of English that we learn about from Fingeret (1983), many refugees who have limited experience with print rely on social networks and their own wits to solve a wide variety of problems. When older adults were asked why they wanted to learn English, they rarely brought up survival concerns (Weinstein-Shr & Lewis, 1991). Rather, most reported that they wanted to learn English to be able to communicate with children or grandchildren. The second theme, then, is communication.

Communication

> *Cambodia was more fun. I had friends there, and they all spoke Khmer. We'd all talk about things, then we'd go get something to eat.*
>
> (S. Yi to A. Atzert, 1990)

This is the response of an elder Cambodian woman as translated by her grandson. She had just been asked what the difference was between Philadelphia's open air market and the market where she shopped in Cambodia. Atzert confesses that this was the first time he actually pictured his language-learning partner as the talkative, bubbly, competent, and sociable person that he now imagined from her answer.

For uprooted adults, there are important consequences of changes in the "communicative economy" (Hymes, 1974) when they enter a setting in which new codes (languages) as well as new channels (writing) are used. One Puerto Rican woman reports that she feels like an outsider in her own children's homes when her grandchildren speak English. A Hmong woman speaks of her fear that her grandchildren will not know what life was like in Laos, and that as their linguistic repertoire changes, she will have no way to tell them.

For parents of school-age children, the change in the communicative economy means that they often have to rely on children to decipher communications from school. One Cambodian man tearfully reported that his son had been expelled from school six months earlier. The boy left every morning at 8:00, returning at 4:00, so the man did not know about the expulsion until six months later when a neighbor told him. He had, until then, depended on the boy to decipher messages from school. This raises the third theme that repeatedly arises in the tales of our neighbors—the theme of power.

Power

I have ears but I am deaf! I have a tongue but I am mute!

(Chinese elder on Life in his English-speaking neighborhood)

What happens when children are the translators, the decoders, the messengers for adults? One tutor noted in his log that he wondered who was in charge when he went to tutor his older Khmer partner and found heavy metal posters displayed in every room in the house. One Lao boy sabotages his mother's efforts to learn English; he disrupts her English lessons and repeatedly tells her that she is too stupid and too old to learn. Another tutor reports that when she calls her Vietnamese partner on the phone, the woman's son hovers on the line, as if English has become his domain to supervise and control. When this woman can't solve a problem, she lets it go unsolved rather than ask her children.

The issues of power have an important impact on issues of schooling. Several parents report their frustration that they are unable to help with homework. Many Asian parents we work with report their fear of looking stupid to their children. Even when kids are willing to be helpful, parents report their shame in having to depend on them.

The discomfort caused by power shifts in communication is as uncomfortable for children as it is for adults. When I asked Asian teens for advice to teachers, one response was particularly poignant—"Please, if I translate for you when you talk to my mother, don't look at me, look at her when you speak" (at Penn TESOL, 1989). This Chinese youth told us of his embarrassment when his own mother was marginalized and when he was treated like an authority in front of her.

These examples show that literacy events (Heath, 1983) and speech events (Hymes, 1974) can be structured in ways to ascribe roles that are empowered or powerless for the interlocutors. The consequences of shifts in power positions have consequences for all who are involved in the shift.

Redefining the Problem: A Family Perspective

If I were to find myself in Laos, I would certainly want my daughter Hannah to succeed in school. Her achievement would be one source of our concern and, hopefully, of our pride. However, that is not all that I would want. I would want her to see me as a competent and loving parent. Despite my limited Lao proficiency, I would want her to see me as a person with authority and with the wisdom of life experience. The way that she was taught in school could have a great impact on the degree to which this would be the case. Would teachers and resettlement workers tell Hannah to learn Lao as quickly as possible and ask us to stop using English in the home because it would be bad for her? Would Hannah have to tell her teacher with shame that she hadn't done her homework because we were unable (too ignorant or stupid) to help her? Would Hannah learn only Lao history, concluding indirectly that our past life in America had nothing to do with her and was thus of no use or consequence? If the goal were only to make Hannah into a successful student, to what degree could the mission succeed under these conditions? If it did, what would the price be for us and for Hannah?

I propose an educational agenda in which family strength and joyful interdependence is the goal, and where schooling is a variable with profound consequences for the prospects of realizing that goal. With a family agenda, the issues and questions shift.

Research

Educational research for a family agenda would explore issues of survival, communication, and power such as those in the three sets of questions posed below:

1. How do refugees, immigrants, or any families served by schools solve or fail to solve problems that require literacy skills? (This requires seeking to discover existing resources in addition to those that are lacking.)

2. What are the functions and uses of literacy (both native and second language) in the lives of people that are served? Who uses what language to whom and under what circumstances? What are the consequences of this particular communicative economy? What are the implications for home-school communications (including the *parents'* experience of those communications)?

3. What is the significance of language in the negotiation of new roles and relationships in a new setting? How have authority and power shifted in families? What is the role of language in intergenerational relationships? What are the ways in which schools influence the process in which these relationships are negotiated?

Experience

With a family agenda, teachers and administrators will continue to share their perspectives. However, channels will also be created for documenting the experiences of mothers, fathers, grandmothers, grandfathers, and children themselves about their lives in school and at home with one another.

Research like that of Twymon (1990) shows the price that parents can sometimes pay for taking on behaviors in the home to help their children do well in school. This research showed that when parent-child interaction became centered around school-like tasks such as the reenactment of reading lessons, the children initially did well in school. However, over time, children began to experience tension, anger, hostility, resistance, and alienation in their relationships at home (Willett & Bloome, 1993). Delgado-Gaitán (1987) provided another example in her documentation of the hopes and frustrations of Mexican parents who desperately want something better for their children. She demonstrated the ways that these adults provide supports within the limits of their resources in a system that does not tap into their potential for more substantial involvement.

The hopes and the frustrations of teachers and administrators are one part of the tale that needs to be told. However, parents' experiences with their children's schools and schooling, the experiences of elders as unique and irreplaceable sources of cultural transmission, and the experiences of children who make sense of the world through lived experiences at school and at home also need to be part of the story on the record that shapes research, decision-making, and policy.

Practice

Research on the experience of children and adults in families can inform practice that aims at supporting the educational achievement of children without undermining the family as a crucial resource for making sense of a new life in a new setting. The Foxfire experiment provided a strong sense of the possibilities for enabling children to strengthen their literacy skills while documenting and valuing the collective knowledge and experience of their families and communities (Wigginton, 1985). In this project, children from the hills of Appalachia collected recipes, folktales, instructions for making banjos, and so forth, by interviewing elders and creating documents that would preserve this information for their future children and their children's children. Innovative educators are beginning to rediscover the power of acknowledging these resources. Navajo parents who are unable to read in any language are often wonderful storytellers who can captivate their children with tales, and who can listen to their children tell or read stories (Gray & Murphy, 1986). Latino adults in the Pajaro Valley have become more interested in learning to read and in sharing literacy experiences with their children because of an emphasis on Spanish literature in addition to English (Ada, 1988).

When schools can capitalize on these resources, literacy skills are developed and relationships are nurtured in synergy. As emphasis is placed on what can be done and what can be shared rather than on what isn't done or what isn't shared, children and adults can develop ways of being together in which they both stretch, learn, and profit from one another. One experiment showed that children who read to their parents improved their reading skills as much as a control group who received equal hours of academic tutoring in reading (Tizard, Schofield, & Hewison, 1982). If I were in Laos, I would imagine feeling pretty foolish trying to struggle through a Lao story, with Hannah looking on in contempt. But I can imagine listening with pleasure as Hannah read proudly to me!

While steps have been taken to use insight into the family for improving school achievement, the next logical step is to use knowledge of schooling and learning processes to strengthen families and communities as resources for their members. With a family perspective, the consequences of educational practice will be measured not only by achievement test scores, but also by measures of success for

families and communities as sources of cooperative problem solving, mutual support for learning, and respect for the resources of the generations. With the challenges that our children will face for solving global problems, teamwork and cooperation between the generations are our best hope.

Note

[1] Project LEIF, Learning English through Intergenerational Friendship, is a model program developed at Temple University Institute on Aging's Center for Intergenerational Learning. Through Project LEIF, over 1,000 college-age volunteers have been trained to tutor English as a second language (ESL) to elder refugees and immigrants at community centers throughout the city; these include a Cambodian Buddhist temple, a Chinese community center, a Latino senior center, and a multicultural neighborhood center. For information about Project LEIF, see Weinstein-Shr, 1989.

References

Ada, A.F. (1988). The Pajaro Valley experience: Working with Spanish-speaking parents to develop children's reading and writing skills in the home through the use of children's literature. In T. Skutnabb-Kangas & J. Cummins (Eds.), *Minority education: From shame to struggle* (pp. 223-238). Philadelphia: Multilingual Matters.

Cochran-Smith, M. (1984). *The making of a reader*. Norwood, NJ: Ablex.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *Schooling and language minority students: A theoretical framework* (pp. 3-50). Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center.

Delgado-Gaitán, C. (1987). Mexican adult literacy: New directions for immigrants. In S.R. Goldman & H. Trueba (Eds.), *Becoming literate in English as a second language* (pp. 9-32). Norwood, NJ: Ablex.

Fingeret, A. (1983). Social network: A new perspective on independence and illiterate adults. *Adult Education Quarterly, 33*, 133-146.

Gray, V.M., & Murphy, B. (1986). *Report on the Navajo parent-child reading program at the Chinle Primary School*. Chinle, AZ: Chinle School District.

Heath, S.B. (1982.) What no bedtime story means: Narrative skills at home and at school. *Language in Society, 2*(2), 49-76.

Heath, S.B. (1983). *Ways with words*. New York: Cambridge University Press.

Hymes, D. (1974). *Foundations of sociolinguistics: An ethnographic approach* (pp. 3-28). Philadelphia: University of Pennsylvania Press.

Moll, L., & Díaz, R. (1987). Teaching writing as communication: The use of ethnographic findings in classroom practice. In D. Bloome (Ed.), *Literacy and schooling* (pp. 195-222). Norwood, NJ: Ablex.

Nickse, R. (1990). Foreword. In C. McIvor (Ed.), *Family literacy in action: A survey of successful programs* (pp. 4-5). Syracuse: New Readers Press.

Simich-Dudgeon, C. (1986). *Parent involvement and the education of limited English proficient students. ERIC Digest*. Washington, DC: ERIC Clearinghouse on Languages and Linguistics. (ERIC Document Reproduction Service No. ED 279 205)

Sticht, T.G. (1988). Adult literacy education. In E. Roth (Ed.), *Review of research in education 1988-89* (pp. 59-96). Washington, DC: American Educational Research Association.

Teale, W., & Sulzby, E. (Eds.). (1986). *Emergent literacy: Writing and reading*. Norwood, NJ: Ablex.

Tizard, J., Schofield, W., & Hewison, J. (1982). Symposium: Reading collaboration between teachers and parents in assisting children's reading. *British Journal of Educational Psychology*, 5(1), 1-15.

Twymon, S. (1990). *Early reading and writing instruction in the homes and schools of three five-year-old children from black working class families*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.

Weinstein-Shr, G. (1989). Breaking the linguistic and social isolation of refugee elders. *TESOL News, 13*(5), 9, 17.

Weinstein-Shr, G. (1992). Literacy and social process: A community in transition. In B. Street (Ed.), *Cross-cultural approaches to literacy* (pp. 279-293). Cambridge: Cambridge University Press.

Weinstein-Shr, G., & Lewis, N. (1991). Language, literacy, and the older refugee in America: Research agenda for the nineties. *College ESL, 1*(1), 53-65.

Wigginton, E. (1985). *Sometimes a shining moment: The Foxfire experience*. Garden City, NY: Anchor Press/Doubleday.

Willett, J., & Bloome, D. (1993). Literacy, language, school and community: A community-centered view. In A. Carrasquillo & C. Hedley (Eds.), *Whole language and the bilingual learner* (pp. 35-57). Norwood, NJ: Ablex.

CHAPTER 6

¿Guariyusei? Adult Biliteracy in Its Natural Habitat

Tomás Mario Kalmar
Lesley College
Cambridge, Massachusetts

One often forgets that the translator is a frontiersman in more than one sense. He creates the very frontier over which he brings his booty. He is like a ferryman whose boat turns the wild beyond of the barbarous babble into the "other" bank.

(Ulrich & Gerkens, 1988, p. 50)

The neologism *adult biliteracy* was coined to give value to a topic of public discourse that seems to want legitimacy. You always risk halving rather than doubling the legitimacy of anything when you add *bi* to it. As Tove Skutnabb-Kangas (1983) says:

> Those who are bi-something are the ones without power: minorities, women, blacks, working class, those who have become bi-something in order to survive. The ones who rule us, white middle class males from the majority groups, have never been forced to look at things from somebody else's perspective. If they are to have the slightest chance to understand anything, they must have mediators, people with whom they in some respects can identify because they share the same cultures, languages, and people. The group who could function as mediators are the migrants—if we gave them a chance. (pp. 326-327)

Philip Bouwsma taught me to look closely at the actual letters, Rip Keller to listen closely to the actual sounds. Hanna Arlene Fingeret taught me to pay close attention to the logic, rhetoric, and irony of my argument, Bridget Suarez O'Hagin to pay close attention to *la primera voz*. My heartfelt thanks to Philip, Rip, Hanna, and Bridget for their invaluable help.

In the United States, *native language literacy* and *bilingual education* put together do not enjoy even half the legitimacy of *adult literacy*. Hence, it seems to some of us worth trying to legitimize the value of *adult biliteracy*. (See, e.g., the *Language Policy Recommendation* of the Literacy Network's 1989 National Forum on Literacy Issues and Policy, reprinted in Kalmar, 1990.) For some, adult biliteracy can never be more than "real" literacy minus native literacy; the subtractive paradigm. For others, adult biliteracy is at least "literacy times two"—the additive paradigm. And for those of us who are ourselves biliterate, adult biliteracy is often experienced as a field of complex variables rather than scalar quantities, biliteracy as "literacy squared"—a multiplicative or even a transcendental paradigm.

To complement the perspective of other chapters in this volume, I offer a sort of parable of the laborers in the vineyard from the Bible (Matthew 20:1-16), a case history of adult biliteracy, not in the publicly funded urban classroom, but in its natural habitat, the no-man's-land between two languages, two orthographies, two economies. Theorizing around a single document (the *Cobden Glossary*, Exhibit B below), I propose to investigate what it would mean to circumscribe adult biliteracy as a legitimate field of academic inquiry and cast it in a theoretical mold.

The Idea of an International Phonetic Alphabet

The paradigm shift that transformed 19th-century philology into 20th-century linguistics is commonly perceived as a Copernican revolution which put script into orbit as a satellite governed by the primacy of speech. As a corollary, the 19th-century question of how two scripts may rotate around each other becomes, for 20th-century linguistics, a mere epiphenomenon, since all scripts may, in principle, be mapped onto one canonical script, represented by the IPA, the International Phonetic Alphabet.

The IPA could reasonably be described as the scientific canonization of what was already functioning as an international phonetic alphabet. The IPA is but the Roman alphabet "writ large." But the Roman is the Greek alphabet writ large, the Greek is the Phoenician alphabet writ large, and so on. Start with present-day Roman, Cyrillic, Arabic, or Devanagari alphabets, each of which has spread and bifurcated from language to language, and go back upstream to their

common origin, to the "unique and once-and-for-all-invention" (Illich, 1987, p. 10), and in each generation of the genealogy you find that right from the start every alphabet is always already saturated with biliteracy. A homogeneous speech community of competent but monoglot native speakers, as envisioned in the enabling fiction of 20th-century linguistics, would have no need for, and no idea of, a phonetic transcription. The protoCanaanite script, ancestor of all phonetic alphabets now used around the world, was itself a strategic political and economic response to heteroglossia, a heterography rather than an orthography. (For a detailed, linguistically informed account of the way adult biliterates have ferried each alphabet over from one language to the next, see Coulmas, 1989.)

Each expansion of the domain of an existing orthography to take possession of new linguistic facts nourishes and is nourished by the idea of an international or universal phonetic alphabet. What is of interest here is the intellectual labor—the conscious, biliterate, adult labor—that must be invested in producing and reproducing a single orthography fit to serve two tongues. The theoretical vision of the IPA, of a language-free generic orthography, is best regarded as a guiding fiction. In practice, in the real world, language-specific values must always enter into an exchange, favorable or unfavorable, with educational, social, political, and economic values. It is this trade-off between values that my parable seeks to illuminate.

A Kind of Algebraic Notation

The canonical status of an institutionalized International Phonetic Alphabet need not prevent us from seeing it as "an alphabet among the alphabets."

> The pretence that one is being presented with a description strictly of spoken language begins to wear thin as soon as it occurs to the reader that the real discovery procedure being employed is invariably: "Assume that standard orthography identifies all the relevant distinctions, until you are forced to assume otherwise." It is as if the two basic principles of geographical surveying were taken to be (1) that an existing map is always accurate until it is proved inaccurate, and (2) that no existing map can be totally inaccurate. The consequence of these two principles would be that the surveyor should never start from scratch making a new map of an area already charted,

> but make only the minimum adjustments to the existing map. This corresponds roughly to the rule of thumb modern linguistics has adopted, whereby an existing orthographic map is made wherever possible to serve as a guide to the topography of speech. (Harris, 1980, p. 9)

Harris's metaphor illuminates every biliterate generation in the genealogy of all actually existing alphabets including the IPA. Coulmas (1989) has shown, in greater linguistic detail than some might have realized necessary, how the creation of every practical orthography is always a variation on the topographical theme articulated by Harris. Coulmas's account ends, however, at the birth of the IPA, which he has no need to include among the (practical) scripts of the world. To sketch out, for present purposes, what such a coda or postscript to Coulmas might look like, it will suffice to focus on the pivotal work of Henry Sweet, the advocate of Broad Romic, which in turn begat the IPA.

Henry Sweet (1845-1912), who "taught phonetics to Europe" (Wrenn, 1946, 1967, p. 154; Howatt, 1984, p. 181), is today best known through his reincarnation as Henry Higgins in Shaw's *Pygmalion* (1941). The original Henry Sweet was a meticulous historian of European speech sounds who understood that the letter killeth but the spirit giveth life. The sounds of speech, which he could discriminate and notate in the minutest detail, were to him always alive with human breathing. He could hear the speech sounds of 9th-century Europe as vividly and precisely as those of 19th-century Europe. In order to write down the history of English speech sounds, he first developed a normalized orthography for the 9th-century West Saxon speech of King Alfred the Great, preserved in surviving 9th-century manuscripts, and then systematically expanded this into a generic orthography for all speech sounds. The generic orthography he called Romic, to distinguish it from Glossic, a rival orthography proposed by his colleague Ellis.

Letter by letter, phoneme by phoneme, language by language, Sweet hammered out his claim that Glossic, which assigned English values to Roman letters, was less useful than Romic, which restored the Roman alphabet's Continental or Late Latin values, the phonemes of what Whorf was to call Standard Average European (Whorf, 1941). Both Glossic and Romic were designed to lower illiteracy

through rational spelling reform. Glossic was an early version of today's phonics, an essentially monolingual reform. Romic was essentially biliterate.

Sweet was an energetic phonetic enthusiast (Shaw, 1941). Only prejudice and sloth could favor the barbaric system of traditional spelling:

> There can, of course, be no doubt that in the end truth and reason will triumph over those arch-enemies of progress, prejudice and sloth, and it is certain that the longer reform is delayed, the more sweeping it will be when it comes. (Wyld, 1913, pp. 87-88)

He was sure that social inequities would be reduced if everyone spelled English in Romic, not Glossic. He therefore distinguished between a Narrow and a Broad version of Romic: Narrow Romic as a scientifically accurate system for professional linguists, Broad Romic as a practical orthography for the laity.

Although the neologism *phoneme* was actually coined by Sweet's East European contemporary Baudouin de Courtenay (see Wrenn, 1967), what it circumscribes was the controlling principle of all Sweet's work, and especially of his distinction between Narrow and Broad speech transcription: between *phonetic* and *phonemic* analysis. "It will be observed that I use the less accurate 'Broad Romic' as *a kind of algebraic notation* [italics added], each letter representing a group of similar sounds" (Sweet, 1888, p. x; see also Wrenn, 1946, 1967, p. 159). Broad Romic letters represent not constants but variables. The algebraic structure of Broad Romic is invoked by saying, in effect: Let there be a one-to-one correspondence between the set of letters {a,b,c, ...} and the segments of speech such that each letter is mapped onto a group of segments which differ from the viewpoint of phonetic taxonomy but which share a single phonological *function*. (This formulation draws on Abercrombie, 1967.)

The mathematization of the phoneme, now thoroughly elaborated by Soviet and East European linguists (see Kortlandt, 1972), began as a formalization of the chain of biliterate transformations which brought us the Roman alphabet in the first place. "The important part of phoneme theory is that two segments may be in complementary distribution in one language, but in parallel distribution in an-

other" (Abercrombie, 1967, p. 87). Sweet's Broad Romic initiated the paradigm shift that Saussure completed: the algebraic axiomatization of the generic vernacular.

But in the 20th century, Broad Romic has forked into (a) the International Phonetic Alphabet used by pure and applied linguists to meet their own professional biliteracy needs and (b) the large family of practical orthographies designed and disseminated by Christian missionaries to meet the biliteracy needs of "Bible-less natives" speaking unwritten tongues.

What Henry Sweet meant by "a kind of algebraic notation" can be illustrated by scrutinizing the following two documents.

Exhibit A

PEDES	FOOZI
FIGIDO	LEPARA
PULLI	HONIR
PULCINS	HONCHLI
CALLUS	HANO
GALINA	HANIN
PRIDIAS	UUANTI
MUFFLAS	HANTSCOH
IMPLENUS EST FOL	IST
MANNEIRAS	PARTA
MARTEL	HAMAR
PUTICLA	FLASCA
FIDELLI	CHALPIR
FOMERAS	UUAGANSO
RADI MEO PARBA	SKIR MINAN PART

Exhibit B

AHORITA REGRESO	AVIVAK
VOLVER	CAMVAK
DEMASIADO	TUMACH
MUCHO	MACH
DEJAME VER	LIMISI
YO NO SE	AIDONO
QUE DICE USTED	GUARIYUSEI
ROTO	BROUKEN
TENGO	AIJEF
DEME	GIMI
NO AY	NODER
POQUITO	LRERO
EL	JIF
ALEGRE	JAFI
POBRE	POF
ALGUNAS	SAM
VECES	TAIMS
ALGUNA COSA	ENI TENK
FIESTA	PARI/PAICTI
SIESTA	NEP
CUANTO	JAMACH
GANAS	DU YOU ORN
NECESITO	AI NID
AIRE	SAM ER
COMPROMETIDO	ENGEICH(D)
YO FUI	AI GUENT
AL PUEBLO	TU TAON
PODEMOS IR	GUIQUEN GOU
AHORA	NAU
NO PODEMOS IR	GUIKENT GOU

BEST COPY AVAILABLE

Artificial and Natural Contexts for Adult Biliteracy

In the United States, adult biliteracy is entangled in a host of controversial pedagogical, social, political, and economic issues (Kalmar, 1988a, 1988b, 1988c, 1992). Precisely because Exhibits A and B can be regarded as pure texts with no context (other than each other), they function effectively as catalysts in workshops designed to help educators talk to one another about the transfer of literacy from language to language and from the classroom to the community.

In some workshops I use Exhibit A as an icebreaker and then introduce Exhibit B. In others I use just Exhibit B. Experience has taught me to expect an interesting difference in the group dynamics set in motion by these alternative opening moves, a difference in how the ice breaks, what people do to make sense out of the text, what they bring to the task, what contexts they imagine, what contexts they recreate for themselves, and, above all, the range of negative and positive *feelings* people express toward the use of Broad Romic to transcribe English speech sounds in the classroom and the community.

Responses to Exhibit A

When I begin a workshop by inviting participants to see what sense they can make out of Exhibit A and to note the strategies they come up with in the process, the first phase usually lasts a couple of minutes. During this phase individuals tend to stare at the document, silent and alone. (This phase reproduces in microcosm the habitat of individual students reading in a generic classroom.)

After a couple of minutes of silence, people start declaring that the text makes no sense whatever. They want to know who wrote it, what use it is, what language it's in, *where it comes from*. The tension that builds up is invariably resolved when small groups start forming to share their frustrations, pool their insights, and make sense of things. (This second phase reproduces in microcosm the natural habitat of a community of scholars, especially 19th-century philologists collaborating on the joint interpretation of a newly discovered text.)

It has never taken the small groups more than about 15 minutes to convince one another that

- Exhibit A is some sort of dictionary;
- The left-hand column records some sort of Romance language;
- The right-hand column records some sort of Germanic language;
- The words appear simultaneously in Romance and Germanic.

Many groups guess (correctly) the meaning of at least some words in the list (e.g., MARTEL = HAMAR = *hammer*) and quite a few guess (again correctly) that the document is an authentic early medieval European text.

The discussions that result always identify as a critical turning point in the small group dynamics the moment when people start listening to one another read aloud various items in the text. (This moment reproduces in microcosm the moment when philologists give voice to hitherto dead languages.) For it is only after people hear rather than read silently the speech sounds represented by, for example, CALLUS and GALINA, HANO and HANIN, that they make the connection with what they already know and exclaim, "Aha! GALINA is the feminine of CALLUS. It's gotta be *hen*." And then someone else will exclaim, "Aha! So HANIN is the feminine of HANO," and someone will butt in, "I get it! They're the same thing, they're both *hen*."

The interesting point, for present purposes, is that my workshop participants by no means claim to be pronouncing the words in question correctly. The precise allophones or speech-segments that would have been used by native speakers of the languages in question remain unknown. But this doesn't matter. Near enough turns out to be good enough. Which goes to show that a knowledge of Broad Romic as a kind of algebraic notation is, in some nontrivial sense, part of our common culture today, at least among the kind of people who attend my kind of workshops.

Only through speculation can we reconstruct the environment in which Exhibit A was originally produced. It does indeed come from an authentic early medieval European document, the unique 9th-century manuscript known to philologists as the *Kassel Glossary* (Elcock, 1960; Marchot, 1895; Titz, 1923). The hermeneutic strategies spontaneously simulated in microcosm by the small groups in

my workshops are the ones used by 19th-century philologists who imagined the manuscript being written in a small community at the margins of the former Roman Empire, where illiterate speakers of two different languages joined in some sort of give and take. The Barbarians spoke a vernacular now identified as Old Bavarian. The Romans spoke something now identified as between Late Vulgar Latin and Early Protoromance. (For an engaging and illuminating account of the interplay between Germanic and Romance languages and literacies in 9th-century Europe, see Illich & Sanders, 1988.) Philologists of Sweet's calibre could prove that it was not the Romans but the Barbarians who decided to broaden the Roman alphabet with its Late Latin values into a biliterate phonetic transcription system in order to map words spoken by one group onto words spoken by the other. The unvoicing of initial voiced consonants (e.g., GALLUS > CALLUS or BARBA > PARBA), which sounds like Romance spoken with a thick German accent, actually represents how the Barbarians heard what the Romans said. The unvoiced phoneme is in the ear of the scribe, not the mouth of the speaker.

Exhibit A is therefore a specimen of adult biliteracy in its natural habitat, and if we can read it today, it is thanks to the continuity of naive or popular Broad Romic from the 9th century to the present.

From A to B

Small groups that have cut their teeth on Exhibit A and are then shown Exhibit B usually burst out laughing. But not everyone gets the joke. As the shock of recognition spreads, the small groups rapidly decide, collectively, that A and B are variations on a common genre, that

- B is some sort of dictionary;
- The left-hand column records a Romance language, namely Spanish;
- The right hand column records a Germanic language, namely English; and
- The same word appears in both Spanish and English.

The laughter is provoked, I believe, by experiencing the transvaluation of the *Container and the Thing Contained*, an inversion of legitimized hierarchies. For some people this is no joke (Cottom, 1989). The sight of actual English vernacular speech-sounds tran-

scribed in a version of Broad Romic, which would have warmed the heart of Henry Sweet, seems to be particularly disturbing to educators who earn their living as professional gatekeepers of traditional English literacy. So while some laugh, others frown.

Responses to Exhibit B

When, on the other hand, I begin a workshop by inviting participants to see what sense they can make out of Exhibit B, the results are far more dramatic. It is as if opening the workshop with Exhibit A releases a sort of disinfectant, in the absence of which Exhibit B strikes many people as pathological. Those who frown are offended by those who laugh. Since the frowners tend to be monolingual English speakers while the laughers tend to be biliterate Latinos, the dialectic is usually mediated by broad-minded English speakers who respect the Spanish language. This results in a ritual drama of strong and contradictory feelings, attitudes, ideologies, definitions, and redefinitions of linguistic, pedagogic, social, political, and economic values. What this reproduces in microcosm is the ritual drama of communities struggling to cope with communicating in a situation where separate ethnolinguistic groups do not speak or understand each other's languages.

> In equating "dramatic" with "dialectic," we automatically have also our perspective for the analysis of history, which is a "dramatic" process, involving dialectical oppositions. And if we keep this always in mind, we are reminded that every document bequeathed us by history must be treated as a *strategy for encompassing a situation*. (Burke, 1973, p. 109)

Whether Exhibit B is a good or a bad strategy for encompassing a situation depends, of course, on who gets to define the situation in question. Biliterate Latinos call it good. The situation they imagine (and try to recreate in my workshops) is not the ESL classroom. It is a diglossic community on the margins of literacy, very much like the medieval community imagined by philologists as the natural habitat of the *Kassel Glossary*, Exhibit A—in short, a community in which people who speak different tongues are engaged in the give-and-take of everyday life and are trying to make speech-sounds intelligible to one another. Exhibit B records—with wit, logic, and panache—what gringos really sound like to monolingual Spanish speakers.

Let's take LRERO, for example. Monolingual English speakers need considerable phonetic instruction before they can be persuaded that LRERO is English. To them it is "obviously Spanish." ERO is a Spanish, not an English, ending. And no English word could possibly begin with the strange-looking LR. (Actually, nor could any Spanish word. But this they don't realize, not knowing Spanish.) The beauty that biliterates see in words like LRERO is inevitably inaudible to monoliterates. *Little* is a poor guide to the way the English word is pronounced with a Southern twang. The traditional dialect spelling *li'l* is not much better, since the one letter *l* represents two very different speech-sounds. Coupling the Roman letters L and R (with their Spanish values) records to a large extent the way the tongue really moves in pronouncing the initial *l* of *li'l*. ERO captures beautifully the vowels, the intonation, and the rhythm of the word as actually spoken by Southerners. The mathematical elegance of Exhibit B is evident only to those who have themselves tried to use the Roman alphabet as a kind of algebraic notation in Henry Sweet's sense.

The frowners in my workshops are ESL teachers who assume (quite mistakenly) that Exhibit B was written by ESL students, in an ESL classroom, under the authority of a legitimate ESL teacher like themselves. They imagine (and try to reproduce in my workshops) a situation in which Exhibit B is, at best, a dubious strategy and, at worst, no strategy at all. "I'd never be allowed to let my students get away with this sort of thing," is a typical response. "This isn't English, it isn't Spanish, it's nothing, it's worse than nothing, it's not bilingual, it's zero-lingual," is another. The most negative feelings are those directed at me personally: "You are condemning these people to second-class citizenship."

"These people" are all too familiar to ESL teachers in publicly funded programs. They are the adult speakers of minority languages, especially Spanish, who "can't even write their own language" (de Tal, 1988). They are the target population referred to in some adult literacy circles as "zero-zero people"—zero English, zero literacy (Kalmar, 1988a, 1992). Meeting their needs has always been a nagging headache to overworked, underpaid part-time ESL and Adult Basic Education (ABE) teachers throughout the United States. The headache won't go away; it's getting worse. Thanks to the 1986 Immigration Reform and Control Act amnesty program, formerly

illegal aliens are raising the percentage of "zero-zero people" enrolling in publicly funded programs. In this context, Exhibit B looks like the cause of the headache, not the cure for it.

Caught in the middle are the progressive ESL teachers who want to empower their students by problem-posing in the ESL classroom. The situation they imagine (and try to recreate in my workshops) is that of a community-based learning environment that simulates the conflicts of languages and cultures in the real world, a classroom in which, under certain circumstances, they may permit their students to talk to one another in languages other than English. The native language phonics or invented spellings on the right hand side of Exhibit B strikes these teachers as an attractive solution to a recalcitrant problem—how to move people from native language literacy to ESL literacy. I have demonstrated elsewhere (Kalmar, 1988a) that this is a problem posed by administrators and funding sources, not by students.

What this group reproduces in microcosm can be illustrated by Nina Wallerstein's ground-breaking book, *Language and Culture in Conflict: Problem-Posing in the ESL Classroom* (1983). Wallerstein cites items taken from Exhibit B as examples of a teaching technique that she calls "eye dialect." For her, such words as JUARUYUSEI [sic], LIMISI, and JAMACH are not English. They are "eye dialect." They require a teacher to translate them into English. (Note that JUARUYUSEI must be Wallerstein's misreading of either JAURUYUSEI = *how do you say* or GUARIYUSEI = *whaddayasay*. See Kalmar, 1983, pp. 37, 94). This technique, which she says "excited students to learn as they eagerly compiled a daily dictionary of phrases they wanted to know," solves the problem of teachers who "may often wonder what students are trying to say or write" (Wallerstein, 1983, p. 37).

Wallerstein goes on to suggest how teachers true to a Freirean approach might experiment with the effectiveness of this technique in their own classrooms, "although the underlying linguistic assumptions for this new method are not clear yet" (p. 38). The above pages have demonstrated, however, that Exhibit B shares with the *Kassel Glossary* (Exhibit A) a biliterate strategy for encompassing a diglossic situation, which, far from being a new method, is as old as the alphabet itself, a strategy whose underlying linguistic assump-

tions were made abundantly clear a hundred years ago by the "founding genius of applied linguistics," Henry Sweet himself (Howatt, 1984, p. 181).

Exhibit B in Its Natural Habitat: Biliteracy in Cobden, Illinois

I have no quarrel with the problem-posing method. However, who poses the problem? Who decides whether the problem has been solved? And, above all, is the problem posed in the ESL classroom by a publicly funded teacher or in its natural habitat by a community free to assemble and speak in a diversity of human tongues and voices? It is a Christian question (The Bible, I Corinthians 14; Kalmar, 1983); it is also a Marxist question (Giroux, 1988; Kalmar, 1974; Mackie, 1981).

The angle of vision of a professional ESL teacher seems to render occult what from a different perspective appears obvious. This, I think, is the controlling paradox of discourse on adult biliteracy in the United States today. As mentioned above, the idea of Broad Romic is, in a nontrivial sense, part of common culture. It was at the very center of the language teachers' reform movement led by Henry Sweet (Howatt, 1984). Why it is nonetheless occult to ESL teachers is an interesting sociology-of-knowledge question worth pursuing elsewhere. Here, however, I concentrate on the even more interesting question of how this obvious or occult idea was invented, reinvented, or inherited by the original authors of Exhibit B.

Just as the text displayed in Exhibit A is copied from an authentic 9th-century manuscript, so that in Exhibit B is copied from a 20th-century manuscript, which I have hitherto (Kalmar, 1983) called *el diccionario mojado* (*mojado* = wetback, illegal alien, undocumented worker, zero-zero, second-class citizen) but which, from now on, I will refer to as the *Cobden Glossary*, because it is so like the *Kassel Glossary*.

Cobden, Illinois, the natural habitat of the *Cobden Glossary*, is a tiny rural community consisting of "a thousand people and two thousand Mexicans" (to quote the local phraseology). In 1980, the "people" spoke no Spanish, the Mexicans no English. To encompass this situation, the strategy embodied in the *Cobden Glossary* was collectively conceived and put into practice by a group of undocumented Mexican migrant workers, most of whom were Tarascan Indians from Cherán, Michoacán.

Between 1978 and 1982, I lived and worked among the original authors of the glossary, of which Exhibit B is a sample. In 1980, I witnessed them composing biliterate texts; I saw and heard them transcribing the speech of their neighbors, and I compiled field notes.

Between 1980 and 1982, I reproduced samples of these texts and field notes in a series of 10 working papers. These circulated through a national network for Hispanic adult education programs. In 1983, Alfred Schenkman published the full series as *The Voice of Fulano: Working Papers from a Bilingual Literacy Campaign* (Kalmar, 1983). To answer the question of how the biliterate use of Broad Romic was "invented, re-invented, or inherited by the original authors of Exhibit B," I am currently writing up a full-fledged ethnography of the *Cobden Glossary*. Could it be the case that the monolingual Mexicans in Cobden learned the use of Broad Romic from the bilingual Tarascans, who learned it from Christian missionaries, who learned it from Henry Sweet? To support this possible answer, I offer in the following pages a series of seven field notes not included in *The Voice of Fulano*, highlighting the need to interpret native theories of biliteracy and exploring historical parallels and possible sources for the native discourse recorded in Cobden in 1980. Look at these notes as snapshots of the ecology and evolution of a hybrid alphabet.

Field Note 1

Alfredo Fabian's slogan is *La lengua tiene que doblarse donde uno la maneja* (Kalmar, 1983, p. 25). In other words, you tell your tongue where to go, it doesn't tell you where to go. (Cobden, June 24, 1980)

Field Note 2

Un sólo alfabeto, pero dos abecedarios distintos (A single *alfabeto*, but two different *abecedarios*)

Constantino took me aside two weeks ago and said, *"Por favor, don Tomacito, enseñame el abecedario de inglés* (Tomacito, please teach me the *abecedario* of English)." I explained that the *abecedario* of English and the *abecedario* of Spanish were the same. A week ago he made the same request and I gave him the same response. Today he explained to me that I was mistaken; the *alfabeto* is the same, but the *abecedario* is very different. He gave me a crash course on the difference between letters and sounds. He explained

that when you recite *las letras del alfabeto* (the letters of the alphabet) in Spanish you are simultaneously saying *los sonidos del abecedario* (the sounds of the *abecedario*), but that this is not so in English. (He seemed to be asking for the phonemes of English along with some allophones.) I told him that he was quite right, that the *abecedario* of English had some 40 distinct sounds, but that, even though I'd been to university I couldn't stand there and recite them in lexical order and I didn't know anyone who could. He was very surprised and seemed to think that I was politely telling him that he was too stupid to master the *abecedario* of English. He simply cannot believe that literate gringos cannot recite the *abecedario*. (Cobden, July 18, 1980)

Field Note 3

El diccionario no sirve.

The group decided today to write down English *como de veras se oye*—the way it really sounds. Constantino led the discussion. His recurrent motif was *no podemos aprender la escritura y la pronunciación de un solo golpe*—we should stop trying to figure out the script system and the speech sounds both at the same time. Everyone reached an agreement that you do have to focus on one or the other, *o la una o la otra*. Some balked at the pressure to decide which they wanted to work on first, but in the end the consensus was *primero la pronunciación y después la escritura* (pronunciation first, spelling later).

They've gone through all the paperback Spanish/English dictionaries they could find and have resolved that *el diccionario no sirve*—the dictionary is useless. Even if you find the Spanish word you're looking for, you can't figure out how to say it in English. And if you hear a common English word and do know how to say it, but don't know what it means, you can't find it in the dictionary.

Before reaching this conclusion, they divided the dictionaries into three types: those (surprisingly many) that have no pronunciation guide at all, those that use the IPA, and those that use their own phonetic alphabet. The group sees no point in learning an alphabet (*una escritura*) used only in a given dictionary and nowhere else. They believe me that scientists claim to be able to write any language in the IPA. But they figure that for their own, less ambitious purposes, the ordinary alphabet can probably do the trick.

They decided to work together to produce their own dictionary of *inglés como de veras se oye, en el sistema de ortografía mexicana* (How English really sounds, according to the Mexican system of orthography). (Cobden, August 11, 1980)

Field Note 4

Tongue-doubling

La lengua tiene que doblarse (The tongue must double itself)

This relates to the ability of a human tongue to "double itself," the axiom that every tongue has an *abecedario*, the principle that there is no such thing as "a nonphonetic language" (Wallerstein, 1983, p. 37), the empirical fact that two *abecedarios* may share a common *alfabeto*, the project of transcribing accurately but economically the actual flow of English speech-sounds *como de veras se oye*. The Mexican discourse on adult biliteracy conducted by the authors of the *Cobden Glossary* matches, point by point, the subtlety and rationality of the scientific discourse inaugurated by Henry Sweet. Examples:

> Phonology without comparison is a sheer impossibility, and the disadvantages of being a foreigner are partly counterbalanced by the advantage of being forced to observe and systematize, and also of having a special knowledge of individual sounds. (Sweet, 1877, pp. 542-543, reprinted in Wyld, 1913, pp. 446-447)
>
> Our existing dictionaries err in trying to satisfy too many requirements at once. . . .
>
> [A short word-list in Broad Romic] would enable anyone to express himself on most of the ordinary topics of life with far greater accuracy than is now attainable, even after years of floundering about in the pages of unwieldy and unpractical dictionaries and grammars. . . .
>
> The first great step will be to discard the ordinary spelling entirely in teaching pronunciation, and substitute a purely phonetic one, giving a genuine and adequate representation of the actual language, not, as is too often the case, of an imaginary language, spoken by imaginary "correct speakers". . . .

> The success of the phonetic method is largely dependent on the notation employed. It is a great step to discard the English values of the vowels. (Sweet, 1884, pp. 582-585, reprinted in Wyld, 1913, pp. 39-42)

Field Note 5

La ortografia mexicana as a version of Broad Romic

The difference between the official orthography of the Royal Academy of Spain and the Mexican orthography developed in the *Cobden Glossary* lies in the fact that since the 1930s—one might almost say since the Spanish Conquest—the Roman alphabet has been systematically extended in Mexico to create practical biliterate orthographies for indigenous native languages. (For an excellent account of the ups and downs of adult biliteracy campaigns in Mexico from the Conquest to the present, see Heath, 1972b, esp. Chapters 6 and 7, pp. 99-150. For those who read Spanish, I recommend the Spanish version, Heath, 1972a, pp. 151-222.)

In the 1930s the intellectual labor of producing and disseminating these biliterate orthographies was shared between socialists and Christian missionaries, in close collaboration. The socialists, influenced by Stalinist policies on linguistic minorities, provided the ideology, and the Christian missionaries, influenced by Sweet's policies on phonetic transcriptions, provided the Broad Romic biliterate alphabets.

Field Note 6

How shall I write this language?

Adult biliteracy has always been central, not marginal, to the work of Christian missionaries. To be acceptable and useful, a new orthography devised by a missionary for a hitherto unwritten language must maximize its "biliteracy quotient," that is, its transferability to the legitimate orthography of the dominant colonial or trade language in the region. In his article aptly entitled, "How Shall I Write This Language?", the Rev. William Smalley (1963) codified a wealth of experience shared by Christian missionaries grappling with the trade-off between language-specific values and competing educational, social, political, and economic values. (The article, first published in 1959, was reprinted along with many detailed, fascinating studies of specific cases in Smalley, 1963.)

Smalley analyzes and lists in order of importance five criteria[1] that govern the production of optimal new writing systems by missionaries:

> 1. Maximum motivation for the learner and acceptance by his society and controlling groups such as the government. Occasionally maximum motivation for the learner conflicts with government acceptance, but usually the learner wants most what is considered standard in the area.
>
> 2. Maximum representation of speech. The fullest, most adequate representation of the actual spoken language is, by and large, the ideal. There are a few points of exception here.
>
> 3. Maximum ease of learning. Many writing systems have failed as a missionary tool because they were essentially too complicated for a learner.
>
> 4. Maximum transfer. Here we refer to the fact that certain letters of the alphabet or other written symbols will, when learned, be applicable to the more rapid learning of the trade or colonial languages in the area. Thus, if a new learner learns a certain pronunciation of a certain symbol in his native language, and if he can use that same pronunciation with the same symbol in the trade or national language, this is a case of transfer. If, however, the same symbol is used with different value in the other writing system, that transfer cannot be made.
>
> 5. Maximum ease of reproduction. Typing and printing facilities are a consideration, although they are not of first importance. (Smalley, 1963, p. 34)

Smalley's criteria 1, 3, 4, and 5 are variations on what I call "maximum biliteracy quotient."

Field Note 7

A Marxist-Christian dialogue

At the top of Smalley's list is the criterion he calls "maximum motivation" but that might more aptly be described as "maximum legitimacy." Christian missionaries do not, by and large, devise or advocate orthographies that question or threaten the legitimacy of the dominant power structures in their host countries. (If and when the power structure changes, especially after a revolution, the orthographies thus given to linguistic minorities may then be criticized as reactionary by the ideologues of the new regime.) This

willingness to accept the prevailing ideology of the host government explains the paradoxical and spectacularly successful collaboration between the founder of the Summer Institute of Linguistics, William Cameron Townsend, and the leader of the Mexican socialist reform movement of the 1930s, President Lázaro Cárdenas. (On the fruitful results of the close personal friendship between Townsend and Cárdenas, see Brend & Pike, 1977, and the works cited in Heath, 1972a, pp.154-184 or 1972b, pp. 99-150.)

Cárdenas was himself from Michoacán and valued his Tarascan heritage. Under his presidency, the Tarascan Project began its ascent to stardom. In 1936, three young missionaries from the newborn Summer Institute of Linguistics conducted ground-breaking biliteracy campaigns in Mexico, along with their leader Townsend. One was Kenneth Pike, who began his illustrious career as a phonetician among the Mixtec of Oaxaca armed with little more than a crash course on vowels and consonants. Pike (1981) recalls with affection "ordering sight unseen" the writings of Sweet and other phoneticians in a Mexico City bookstore. The other two young missionaries were Maxwell and Elizabeth Lathrop, who chose Tarascan and settled in Cherán, Michoacán. (In 1980, Tarascans in Cobden, Illinois, would fondly describe "don Max" to me as an old gringo who had lived in Cherán forever and who, they all agreed, spoke a purer and more correct variety of Tarascan than any indio. He had read the old books, the Tarascan/Spanish glossaries compiled by Vasco de Quiroga at the time of the Conquest.)

The Tarascan Project, including Carapan and Patzcuaro as well as Cherán (see Friedrich, 1986, p. 61 for a useful map), became the showpiece of adult biliteracy campaigns, first on a national level, then, after 1937, on an inter-American (i.e., Latin American) level (Heath, 1972a, 1972b), finally becoming, after 1951—through Jaime Torres Bodet's leadership in UNESCO—a paradigmatic "exemplary program" worldwide (Heath, 1972a, p. 208; 1972b, p. 139). The virtues of Tarascan culture and the poetic "metaphonological awareness" of Tarascan linguistic theorizing (Friedrich, 1975, 1986) would need to be taken into account in a full analysis of the unusual success of this project, which simultaneously launched the Mexican adult biliteracy movement and the Summer Institute of Linguistics.

For 50 years, Tarascans in Cherán have been used to producing and reproducing various Tarascan/Spanish wordlists or glossaries written *en el sistema de ortografía mexicana*: that is, in a version

of Broad Romic with maximum biliteracy quotient. And it was bilingual Tarascans from Cherán who showed their monolingual Hispanic and Anglo companions in the orchards around Cobden how to catch the local lingo *como de veras se oye*, how to play it by ear, learn it by heart, *líricamente*, how to make their own Spanish/English glossary by stretching—*¡otra vez la misma!*—the biliteracy quotient of *la ortografía mexicana*—the working alphabet of the teacherless campesino. One letter, one sound. One man, one vote. Each one teach one.

Conclusion

This completes my sketch of a tradition of adult biliteracy, which could, I believe, be traced from the authors of the 9th-century *Kassel Glossary* to the authors of the 20th-century *Cobden Glossary*, an apostolic tradition codified and canonized by Henry Sweet and his followers at the turn of the 19th century, transplanted to Cherán, Michoacán by the Christian founders of the Summer Institute of Linguistics and the socialist leaders of the Cardenista reform movement in the 1930s, and imported into the heartland of the United States by "the group who could function as mediators if we gave them a chance," the illegal migrants who labor in our vineyards.

Note

[1] Secular and Marxist writers on the production and distribution of orthographies continue to draw on Smalley's five criteria. Smalley (1963) is cited as an authority, for example, by Donaldo Macedo in his doctoral thesis on the phonology and orthography of Cape Verdean Creole (Macedo, 1979), by Joshua Fishman in a long section on the creation of writing systems in *Current Trends in Linguistics 12* (Fishman, 1974), and by Coulmas, 1989, along with a detailed commentary.

References

Abercrombie, D. (1967). *Elements of general phonetics*. Edinburgh: Edinburgh University Press.

Brend, R.M., & Pike, K.L. (Eds.). (1977). *The Summer Institute of Linguistics: Its works and contributions*. The Hague: Mouton.

Burke, K. (1973). *The philosophy of literary form*. Berkeley and Los Angeles: University of California Press.

Cottom, D. (1989). *Text and culture: The politics of interpretation*. Minneapolis: University of Minnesota Press.

Coulmas, F. (1989). *The writing systems of the world*. Oxford: Basil Blackwell.

de Tal, F. (1988). *Even in my own tongue*. Lawrence, MA: Lawrence Literacy Coalition. (ERIC Document Reproduction Service No. ED 326 085)

Elcock, W.D. (1960). *The Romance languages*. New York: Macmillan.

Fishman, J.A. (1974). The sociology of language: An interdisciplinary social science approach to language in society. In T.A. Sebeok (Ed.), *Current trends in linguistics 12* (pp. 1829-1884). The Hague: Morton.

Friedrich, P. (1975). *A phonology of Tarascan*. Chicago: University of Chicago Press.

Friedrich, P. (1986). *The language parallax: Linguistic relativism and poetic indeterminacy*. Austin: University of Texas Press.

Giroux, H. (1988). Border pedagogy in the age of postmodernism. *Journal of Education, 170*(3), 162-181.

Harris, R. (1980). *The language-makers*. Ithaca, NY: Cornell University Press.

Harris, R. (1986). *The origin of writing*. LaSalle, IL: Open Court.

Heath, S.B. (1972a). *La política del lenguaje en México de la colonia a la nación*. Mexico, D.F.: Instituto Nacional Indigenista.

Heath, S.B. (1972b). *Telling tongues: Language policy in Mexico, colony to nation*. New York and London: Teachers College Press.

Howatt, A.P.R. (1984). *A history of English language teaching*. Oxford: Oxford Univesity Press.

Illich, I. (1987). A plea for research on lay literacy. *Interchange, 18*(1-2), 9-22. Toronto: The Ontario Institute for Studies in Education.

Illich, I., & Sanders, B. (1988). *ABC: The alphabetization of the popular mind*. San Francisco: North Point.

Kalmar, T.M. (1974). *Learning community*. Sydney: Action for World Development and Education Commission of Australian Yearly Meeting of Society of Friends.

Kalmar, T.M. (1983). *The voice of Fulano: Working papers from a bilingual literacy campaign*. Cambridge, MA: Schenkman. (ERIC Document Reproduction Service No. ED 326 082)

Kalmar, T.M. (1988a). Do we need a linguistic minority task force? In T.M. Kalmar & F. de Tal (Eds.), *Working papers from the Lawrence Literacy Coalition*. Lawrence, MA: Northeast Consortium of Colleges and Universities in Massachusetts. (ERIC Document Reproduction Service No. ED 326 085)

Kalmar, T.M. (1988b). *A five-year literacy plan for the Lower Merrimack Valley*. Lawrence, MA: Northeast Consortium of Colleges and Universities in Massachusetts. (ERIC Docu- ment Reproduction Service No. ED 326 085)

Kalmar, T.M. (1988c). *Who requests ESL? A preliminary study on linguistic minority applicants to community colleges in Northeastern Massachusetts*. Lawrence, MA: Northeast Consortium of Colleges and Universities in Massachusetts. (ERIC Document Reproduction Service No. ED 326 083)

Kalmar, T.M. (1990). *Adult biliteracy: Testimony delivered before a public forum on issues in Hispanic education*. Boston: Adult Literacy Resource Institute. (ERIC Document Reproduction Service No. ED 324 983)

Kalmar, T.M. (1992). Drawing the line on minority languages: Equity and linguistic diversity in the Boston Adult Literacy Initiative. *Journal of Adult Basic Education, 2*(2), 84-112.

Kortlandt, F.H.H. (1972). *Modeling the phoneme: New trends in East European phonemic theory*. The Hague: Mouton.

Macedo, D.P. (1979). *A linguistic approach to the Capeverdean language*. Unpublished doctoral dissertation, Boston University.

Mackie, R. (Ed.). (1981). *Literacy and revolution: The pedagogy of Paulo Freire*. New York: Continuum.

Marchot, P. (1895). *Les gloses de Cassel: Le plus ancien texte rétoroman*. Fribourg: Libraire de l'Universite.

Pike, K.L. (1981). An autobiographical note on phonetics. In R.E. Asher & E.J.A. Henderson (Eds.), *Towards a history of phonetics* (pp.181-185). Edinburgh: Edinburgh University Press.

Shaw, G.B. (1941). *Pygmalion*. Harmondsworth: Penguin.

Skutnabb-Kangas, T. (1983). *Bilingualism or not: The education of minorities* (L. Malmberg & D. Crane, Trans.). Clevedon: Multilingual Matters.

Smalley, W.A. (1963). How shall I write this language? In W.A. Smalley (Ed.), *Orthology studies: Articles on new writing systems*. London: United Bible Society.

Sweet, H. (1877). *A handbook of phonetics including a popular exposition of the principles of spelling reform*. Oxford: Clarendon.

Sweet, H. (1884). The practical study of language. *Transactions of the Philological Society 1882, 4*, 577-99.

Sweet, H. (1888). *A history of English sounds from the earliest period with full word-lists*. Oxford: Clarendon.

Titz, K. (1923). *Glossy Kasselske*. Prague: Rozpravy České Akademie Věd a Umění Třida III, Číslo 55.

Wallerstein, N. (1983). *Language and culture in conflict: Problem-solving in the ESL classroom*. Reading, MA: Addison-Wesley.

Whorf, B.L. (1941). The relation of habitual thought and behavior to language. In L. Spier (Ed.), *Language, culture, and personality: Essays in memory of Edward Sapir* (pp. 134-159). Menasha, WI: Sapir Memorial Publication Fund.

Wrenn, C.L. (1946). Henry Sweet. *Transactions of the Philological Society, 1946*, 177-201.

Wrenn, C.L. (1967). *Word and symbol: Studies in English language*. London: Longman, Green.

Wyld, H.C. (Ed.). (1913). *Collected papers of Henry Sweet*. Oxford: Clarendon.

CHAPTER 7

Literacy as Cultural Practice and Cognitive Skill: Biliteracy in an ESL Class and a GED Program

Nancy H. Hornberger
Joel Hardman
Graduate School of Education
University of Pennsylvania

Literacy is often regarded as a neutral and technical tool, identified in terms of discrete elements of reading and writing skills, and seen as autonomous and independent of context. Under this view, literacy, once acquired, brings not only positive cognitive, social, and economic consequences to the literate individual, but also social and economic development to the literate society (Wagner, 1990, pp. 8-9). Problems with this view include the implication that illiteracy necessarily precludes abstract reasoning and the attribution of a cause-and-effect relationship between literacy and development (cognitive, social, and economic), where research evidence at best supports only a correlational one.

Street (1993) has suggested that an alternative to this "autonomous" model of literacy is the "ideological" model, in which literacy is seen as "inextricably linked to cultural and power structures in society" and attention is on "the variety of cultural practices associated with reading and writing in different contexts" (p. 7) rather

We would like to thank the students and staff of *Abriendo Caminos* and the SEAMAAC ESL classes for welcoming us as participant observers in their midst. We gratefully acknowledge support from a National Academy of Education Spencer Fellowship, which enabled Hornberger to devote full time to this research during 1989; and from the Dean's Fellowship of the Graduate School of Education of the University of Pennsylvania, which enabled Hardman's participation in the research. We also thank David Spener, Brian Street, and participants at the National Clearinghouse on Literacy Education's Colloquium on Biliteracy (January 1991) for helpful comments on earlier versions of this paper.

than on reading and writing in and of themselves. While the autonomous model focuses on "how literacy affects people," the ideological model takes note of "how people affect literacy" (Kulick & Stroud, 1993, p. 31).

Some suggest that these two approaches to literacy are irreconcilable, that the autonomous and ideological models of literacy are polarized (see Street, 1993), that literacy as cognitive skill is at odds with literacy as cultural practice. This paper aims to resolve perceived conflicts between cognitive and cultural (or autonomous and ideological) approaches to literacy, by using Hornberger's (1989) nine continua of biliteracy as a framework for examining two specific situations of biliteracy and biliterate development. By doing so, we hope to show that the two approaches should not be viewed as opposing beliefs of what literacy is, but different ways of looking at literacy. To understand any particular instance of (bi)literacy from the participants' point of view, both perspectives need to be understood by the observer. A generous understanding of the notion of literacy as cultural practice allows for the possibility that the cognitive or autonomous aspects of literacy are themselves part of a culturally circumscribed activity.

Hornberger (1989) uses the notion of intersecting and nested continua to demonstrate both the multiple and complex interrelationships between bilingualism and literacy, and the importance of the contexts and media through which biliteracy develops. Biliteracy refers to "any and all instances in which communication occurs in two (or more) languages in or around writing" (Hornberger, 1990, p. 2), and the continua framework suggests that the development of biliteracy occurs:

> 1) simultaneously along (a) the first language–second language transfer continuum, (b) the reception–production continuum, and (c) the oral language–written language continuum;
>
> 2) through the medium of two (or more) languages and literacies that vary along (a) the similar–dissimilar linguistic structures continuum, (b) the convergent–divergent scripts continuum, and (c) the simultaneous–successive exposure continuum; and
>
> 3) in contexts—including every level of context from the face-to-face interactions involving individuals who are becoming biliterate to the global politico-economic situations and the

national policy settings in which they are doing so—that are defined by being situated along (a) the micro-macro continuum, (b) the oral-literate continuum, and (c) the monolingual-bilingual continuum.

From this framework, Hornberger argues that in order to understand any particular instance of biliteracy, be it a biliterate individual, situation, or society, we need to take account of all dimensions represented by the continua. At the same time, the advantage of the framework is that it allows us to focus on one or selected continua and their dimensions without ignoring the importance of the others.

The two concrete situations of biliteracy and biliterate development examined here are part of a larger long-term comparative ethnographic study on biliteracy in two communities in Philadelphia. Each of the authors of this chapter has been involved in the study for two years or more, and intensively for several months in the situation we describe.

The first situation is an adult ESL (English as a second language) class for recent Cambodian refugees (all women) taught by a young Cambodian woman who has been in the United States through high school and a few years of community college and vocational school. It is the assumption of this paper that the teacher and students in this class, as members of an urban Cambodian refugee community, share norms of behavior and language use and also share attitudes toward learning and what it means to know a language. Therefore, their work together reflects a culture of literacy. When their class is read using the continua of biliteracy, it will be shown that a cognitive-skills approach to literacy (emphasizing mechanical encoding and decoding skills) coexists comfortably with a cultural-practice approach characterized by student-initiated, teacher-supported social learning strategies.

The second specific biliteracy situation is ASPIRA's[1] *Abriendo Caminos* (Creating Opportunities) program, serving approximately 60-80 Puerto Rican adolescents (ages 16-21) per year in parallel Spanish-medium and English-medium GED (General Educational Development) classes. The program includes not only GED instruction, but also cultural and self-awareness training and work orientation

and experience. An examination of this program using the continua of biliteracy reveals how the program approaches literacy as cognitive skill while at the same time embedding it as cultural practice.

Each biliteracy situation in turn will be briefly described and analyzed using the continua; Hardman will describe the Cambodian adult ESL class, and Hornberger the Puerto Rican GED program. A concluding section will return to consideration of the coexistence of the two models.

A Cambodian Adult ESL Class

The ESL class for Cambodians was founded in the mid 1980s by the Southeast Asian Mutual Assistance Associations Coalition, Inc. (SEAMAAC) in Philadelphia. SEAMAAC is made up of Cambodian, Chinese, Hmong, Lao, and Vietnamese associations. It was formed in 1979 to address important issues and concerns common to the newly arriving Southeast Asian refugees. The founders of the coalition were especially concerned with issues such as gangs and fighting, drugs, and joblessness (interview, director of SEAMAAC, July 27, 1990).

The ESL program is a part of SEAMAAC's program in adult basic education. The director of SEAMAAC sees its primary goal as basic or survival English skills: reading the gas bill, reading street signs, and so forth. And, because the students are almost all mothers of school-age children, the director sees it as important for them to be able to communicate with their children's teachers (interview, July 27, 1990). The 1989-1990 class described here was held in the basement of a rowhouse in West Philadelphia that is owned by the Greater Philadelphia Overseas Chinese Association, a member of SEAMAAC. The Chinese Association provided space and supplies for this class as well as for other ESL classes for Chinese.

The Cambodian ESL class was held four afternoons a week for two hours each. The teacher for three of those classes was a Cambodian woman in her 20s, Sarah Lim. She has been in the United States since high school, has been through two years of college, and is just finishing a vocational program for laboratory technicians. She is nearly fluent in English. The students were almost all women between 25 and 35 years old who had come to the United States in the last five years.

Most of the students had received little formal education in Cambodia or in the refugee camps. As there were no entrance requirements for the class, the students were quite diverse in their English proficiencies and levels of literacy. Most were literate in Khmer, though some were not. Most of them knew the English alphabet and were familiar with reading and writing English words, though a few were not. Some could carry on a basic conversation in English, but most could not. There were no graduation requirements for the class, and all the students received a formal certificate from SEAMAAC at the end of the course.

On any given day, between 5 and 10 students showed up for class somewhere between 2:00 and 2:15 in the afternoon. They often brought their children, who played in or outside the classroom. Often, in the middle of class, students would yell at their children to be quiet or to go home. They would leave class to attend to crying children, give someone a key, or just go home. Some students seldom participated in class activities, but would instead just sit quietly and watch what their neighbors were doing. All through class the students chatted comfortably in Khmer and laughed.

Despite the above description, the class was not informal or learner-centered in the current pedagogical sense. Sarah, the teacher, was quite formal. In the classroom she seemed to create a great distance between herself and the students. She was very serious and rarely joked. She tried to speak entirely in English. To the outside observer, she seemed to make little effort to be interesting, to entertain, to excite, or to be friendly. Her role as teacher caused her to behave in extremely formal ways—more formal than American ESL teachers who commonly try these days to break down traditional barriers between teachers and students.

What I perceived as formality and informality did not lead to observable conflict in the classroom; the students and the teacher did not seem to be working at cross-purposes. Together they appeared to have created a context for learning appropriate to their desires and goals as language learners. Somehow, what I (as educational researcher) saw as a conflict between literacy-as-cognitive-skill and literacy-as-cultural-practice approaches to literacy acquisition, the students and teacher experienced smoothly as their way of learning. One classroom activity that demonstrates some of the tensions I perceived surrounding literacy acquisition will be described using

Hornberger's three continua of biliterate development: L1–L2 (first language–second language) transfer, reception–production, and oral–written.

The L1–L2 transfer continuum: Formal L2 emphasis with informal L1 support

Sarah's nearly exclusive use of English in the classroom suggests a belief that using her students' first language, Khmer, was of no use to her instruction or the students' development of English. At the time, I read this as a formal approach to second language instruction reflective of certain approaches, such as audio-lingualism, which view the second language as a discrete set of skills to be learned and practiced in a controlled, formal environment. Sarah's avoidance of Khmer might indicate a fear of L1 interference in L2 acquisition. However, as shown below, the students relied on Khmer to respond to Sarah's questions and to help each other understand what was going on. Also, though not reported below, some of the students wrote in Khmer in their notes, mostly to help with vocabulary by writing down the meanings of English words, indicating that the students did believe that their L1 was an appropriate tool to use in learning English.

February 22, 1990; 2:26-2:34 p.m.

The students have finished copying a dialogue from the board and a list of new words with blanks after them which Sarah wrote on the board before the beginning of class.

Feb. 22, 1990

AT THE DENTIST

(continue from Tuesday)

Dr.: Do you have any pain?

Kim: Yes. A little (pointing) in this tooth here in back.

Dr.: Let me see. Open your mouth, please . . . wider . . . . Does this hurt?

Kim: A little.

Dr.: I can see you have a big cavity there. I would also like to take an X-ray today to see if you have any other cavities.

Kim: Oh. O.K.

Dr.: After we take the X-ray, we'll clean up your teeth. Then we'll make an appointment for you to come back next week.

Kim: O.K. Thank you.

Give the meaning of:

1) patients _____

2) cavity _____

3) appointment _____

4) reminder note _____

Sarah asks the students to write the meanings of the new words.

Sarah: O.K., does anybody remember what this means? (She points to *patient* on the board. We talked about it on Tuesday. If you remember, write it down. (She stands silently for two minutes.)

Sarah: Finished? Just give the main . . . meaning? The meaning of the word, like, patient means something else. Another word for patient? (no response) What is appointment? (A student answers in Khmer.) O.K., in English.

A student: You make appointment.

Sarah: Set up time and date. (She writes that on the board.)

Sarah: What is reminder note? (She waits a long time for answers. There are a few answers in Khmer. Sarah writes on the board after patients: *People visit doctor or dentist.*) What is cavity?

A student: Cavity is when teeth hurt.

Sarah: Right. (She writes on the board: *Big holes.*) O.K., reminder note. Anybody think of it yet? (long pause) Reminder note. (There is some scattered Khmer. Sarah explains reminder note in English, writes on the board: *short letter.*) A short letter is called a reminder note. O.K., is everybody finished copying down from the board?

(She walks around and checks a student's work.)

The reception–production continuum: Repeating, copying, and reading aloud

I did not perceive any conflict between the formal and informal along this continuum. Both Sarah and the students were most comfortable with what are usually considered the more passive receptive skills: repeating, copying, listening, and reading aloud. Reading

aloud, especially, seemed to be a ritual that brought Sarah and the students together. Interestingly, however, repeating and copying are skills that draw on both ends of the reception–production continuum simultaneously; reproduction (repeating, copying) has both receptive and productive aspects. It is likely that Sarah and her students saw these activities as more productive than I did; that is, literacy as cultural practice may shape particular definitions of literacy as cognitive skill. The same is true for reading aloud, which draws not only on both ends of the reception–production continuum, but also on both ends of the written–oral continuum discussed next. Below is a description of their reading routine.

February 22, 1990; 2:35-2:50 p.m.
Sarah: O.K., let's read over.

Sarah reads a line of the dialogue written on the board, and the students repeat each line twice. They even repeat the word "pointing," which is a parenthetical stage direction written in the dialogue. Everyone reads together, loudly. When they are finished, they repeat the procedure. Next, the students read as a group, without prompting or instruction from Sarah. It seems very routine. Sarah points to words on the board often as they read. When they are finished, Sarah asks them to repeat. Again, they read "Yes . . . a little, pointing in this tooth. . . ."

Sarah next nominates students to read. She says, "O.K., who wanna be a doctor and who wanna be the patient?" Then she nominates two students who had not raised their hands. The student playing Kim reads "pointing." They read through, with Sarah having to prompt only on "cavities" and "little," then they switch parts and read again.

While another pair of students is reading the dialogue, it is clear that one of them is barely literate in English. She needs prompting every other word or so. She also gets prompts from students next to her. Over and over, Sarah asks her to repeat "little." The typical prompting pattern goes something like this: prompt from a student, attempt at repetition, prompt from Sarah, a second attempt.

The oral language–written language continuum: The authenticity of reading aloud

Both formal and informal modes in this classroom embedded the written within the oral, and vice-versa. Sarah almost never spoke about anything that wasn't written down or soon to be written

down, and the students never said anything that wasn't written or about something written. Also, as shown above, they read aloud most of what they wrote. While neither their oral nor written language use in English was what would be called "authentic" in Edelsky's (1986) sense of the word, there is the possibility that there was more meaning to their reading, writing, and speaking activities than an outsider could readily see. The question of authenticity is a complex one, and I believe the degree of authenticity of certain literacy events (such as reading aloud, repeating, or copying) varies cross-culturally—another instance of literacy as cultural practice shaping definitions of literacy as cognitive skill.

The ability of students in this class to read aloud far exceeded their ability to speak or even to understand what they were reading. Even when reading a dialogue aloud, as shown above, their commitment to reading a stage direction indicated that they saw the dialogue simply as written language, with no relation to what might be a real conversation. Below is another example of how what might look like a listening and speaking activity is really another chance to practice reading aloud in chorus.

February 22, 1990; 2:50 p.m.

After students read the dialogue aloud, Sarah reviews the vocabulary. The answers to her vocabulary questions were written on the board earlier. Students answer her as a group, reading from the board.

Sarah:	**Students:**
O.K. what is "cavity"?	big hole
How do you get "cavity"?	hurt your teeth
What is "patient"?	people visits doctor or dentist
What is "appointment"?	set up time and date
What is "reminder note"?	a short letter

The episodes described above exhibit the combination of a cognitive skills approach with a cultural practice approach to literacy instruction. By cognitive skills approach, I refer to those teacher-directed activities—emphasizing mechanical encoding and decoding skills (particularly decoding) through copying, reading aloud, and vocabulary drills—that reflect an autonomous model of literacy. By cultural practice approach, I refer to social learning strategies that

are student-directed, though implicitly supported by the teacher—including prompting, collaboration, and using the L1 to answer questions and talk with other students—and that reflect an ideological model of literacy. Not shown in the examples above is the rather fluid movement of students and their children in and out of activities and in and out of the classroom, illustrating how, in fact, the formal literacy-learning activity of these students is not truly autonomous from their other life activities—activities that taken as a whole constitute their cultural practice.

As stated above, though I perceived these differences in the teacher's and students' approaches to literacy acquisition, there was in fact no conflict in the classroom. Both teacher and students were living up to the others' expectations of behavior. The continua show that there was actually a good deal of common ground between teacher and students in the area of biliterate development, though at first I only noticed the great difference in their use of L1 and L2. The two approaches described above are complementary parts of a larger whole—the larger culture of teaching, learning, and literacy in the Cambodian community.

A Puerto Rican GED Program

The *Abriendo Caminos* (Creating Opportunities) program was founded in 1986 by ASPIRA, Inc. of Pennsylvania and was designed "to help what has been regarded as the most difficult of populations—Hispanic high school dropouts with dead-end futures" (ASPIRA, correspondence, April 27, 1990). The program has been housed since 1988 in the heart of Philadelphia's Puerto Rican community in a spacious two-story former firehouse donated by the city and refurbished by ASPIRA. The program runs from September to May, enrolling 60-80 Puerto Rican adolescents, ages 16-21, each year. To enroll in the program, the student must be able to read at a sixth-grade level or higher. English-dominant students are assigned to the English-medium class and Spanish-dominant students, most of them recently arrived from Puerto Rico, are assigned to the Spanish-medium class. Placement is generally done on the basis of whether students' previous schooling has been mostly in English or in Spanish; only in cases where students have had fairly equal exposure and appear to be equally at ease in both languages are they asked about their language preference in reading (interview with program director,

June 7, 1989). During the 1989-1990 year, there were four classes: two English-medium GED classes, one Spanish-medium GED class, and one pre-GED class, each class meeting in either the morning or afternoon session. In each three-hour session, two hours were devoted to GED work and the third hour to a "reinforcement" time, taught by the program's counselors and focused on cultural and self-awareness training.

Abriendo Caminos receives funds through the federal Job Training Partnership Act (JTPA), which, among other things, aims to provide avenues to employment for low-income youth. Under this act, the program must place a certain percentage of its students in jobs; and the students must stay on the job for at least 30 days to be counted a successful placement. Toward fulfillment of this goal, the *Abriendo Caminos* staff not only seek to establish on-going partnerships with employers in the Philadelphia area for placement of their students, but also emphasize work orientation in their instruction.

In the following paragraphs, I will consider some aspects of the *Abriendo Caminos* program from the perspective of the continua of biliteracy, concentrating on the continua of biliterate contexts. A consideration of the program context in the light of the macro-micro continuum will bring out the ways in which the program approaches literacy as a cognitive skill while simultaneously embedding it as cultural practice; the monolingual-bilingual continuum will reveal the significance of the cultural awareness training for both the English- and the Spanish-medium groups; and the oral-literate continuum will suggest that powerful English literacy is embedded in Spanish oral language use and that changes in biliteracy configurations may entail significant social disruption.

The macro–micro continuum: Traditional teaching in a non-traditional environment

The overriding goal of the *Abriendo Caminos* program is for all of its students to pass the GED test, and they have succeeded at a 70% rate in the three years of operation (interview with program director, March 20, 1991). For those students who enter the program speaking only or mostly Spanish, the program's concomitant goal is for them to learn English. There is a clear cognitive skill approach to both GED and ESL literacy; both the GED and the ESL curricula are structured around discrete reading and writing skills that must be mastered.

In the GED classes, the students work out of the English and Spanish versions of the GED preparation books. The books are organized around the areas tested on the examination—math, science, social studies, writing, and reading comprehension—and include diagnostic tests, sample problems, exercises for developing skills, some reference information (charts, glossaries), and practice tests. The students work at their own pace, area by area, testing regularly until they pass.

The program director keeps the focus on mastering the GED exam. In some cases, due to funding constraints, this focus must be more narrowly defined than the participants would like. For example, students are tested regularly, despite the fact that the practice tests can be very discouraging when students repeatedly fail to pass. In addition, the director had to put a stop to a play that the Spanish GED teacher had been working on with her students to both build up their skills in English and contribute to their motivation, because the students were too far behind in their GED work (personal observation, November 30, 1989).

Abriendo Caminos has found that the GED preparation books it must use are deficient in many ways. Inadequacies identified by students and teachers include gaps in information, confusing instructions, linguistic and sociolinguistic differences, and sociopolitical assumptions. In the science area of the Spanish GED book (Serrán-Pagan, Acosta, & Marquez, 1987), for example, topics are tested but not covered; the teacher will have to use the local library to supplement the book's inadequate information. In the writing area, instructions to correct the spelling of a list of words are misleading, because in fact some of the words are already correctly spelled. Furthermore, as a student pointed out, in the case of homonyms, you can't tell which one is intended, since no context is given. The program director notes that the Spanish GED book causes some problems for the students because it reflects a variety of Spanish different from the Puerto Rican variety they speak. (Editors' note: See Ramírez, this volume, for a discussion of the different language varieties spoken by Hispanics in the United States.) In addition, for these bilingual students, certain points at which the English and Spanish languages, orthographies, or spelling conventions differ may cause trouble: For example, students complain that, according to the book, the words *Incas*, *Mayas*, and *Aztecs* are not capitalized, whereas they should be because they are proper names. Further-

more, some exercises carry rather strong sociopolitical messages that remain unquestioned; for example, two sentences for which students were asked to identify and correct errors of article usage were: a) *Estados Unidos son una nación económicamente fuerte* (The United States is an economically strong nation); and b) *Los Estados Unidos es un gran potencia militar* (The United States is a great military power).

These inadequacies raise legitimate doubts and provide opportunities for further questioning and intellectual inquiry. The overall approach to them in the class and in the program, however, is not to take them as starting points for investigation, but rather to determine what would be the correct answer in terms of the GED book and proceed from there. In this sense, the approach to GED literacy is one of mastering these discrete pieces of reading and writing, independent of contextual meaning and variation.

In 1989-1990, *Abriendo Caminos* adopted a new ESL curriculum for use in its GED program,[2] the Comprehensive Competencies Program (CCP). The CCP is described by its creator, U.S. Basics of Alexandria, VA, as a "learning management system designed to deliver individualized, self-paced, competency-based instruction using print, audio-visual and computer-assisted instruction combined with one-on-one teaching." This computerized program includes both academic and functional components; *Abriendo Caminos* is emphasizing the latter (interview with program director, September 18, 1989).

The CCP curriculum is organized hierarchically within each component, such that a given lesson is to be found within a given unit within a given level, in a given subject, at a certain tier in the program that corresponds to a student's general level of ability. Each lesson is filed in a separate binder and labeled; in each binder are the core print lesson, an audiocassette, language cards for use on a language card reader, references to print and computer-assisted instruction supplements, tutorial activities, lesson assignments, mastery tests, and forms for tracking learner progress. The use of this program involves extensive record-keeping, including a computerized database on each student, with information such as personal information, years of school, assistance programs (food stamps, housing assistance, etc.), test scores, number of hours completed in each of various CCP units, and entry and exit dates.

As with the GED program, students work individually, proceeding in order through the lessons, units, and levels, with regular testing to assess their progress. As with the GED program as well, emphasis is on the students' mastery of the discrete pieces of reading and writing as presented by the materials, independent of contextual meaning or variation. For example, sequencing of the discrete pieces of language from one level to the next seems, in some cases, to leave the lowest level learner with the least amount of significant meaningful content. In the sequence from 2.1.3.2.1 (Functional Foundations) to 2.1.3.3.1 (Functional Frameworks) to 2.1.3.4.1 (Functional Bridges), for example, students proceed from sounds (at the beginning, middle, and end of words) to vocabulary (extended family) to topics (the social security system and making phone calls). Further, scoring procedures on the tests do not allow for sensitivity to students' biliterate or sociolinguistic knowledge: When Lourdes succeeds in identifying the object pictured and the name and position of the vowel sound in it (for five different objects), missing only because she calls *e* /e/ instead of /i/ and *i* /i/ instead of /ai/, she nevertheless must be marked wrong for the whole question simply because of confusion between the Spanish and English names for vowels; when Nilsa completes a personal information writing task perfectly except for spelling Pennsylvania as Pensilvania, she too must be marked wrong for the entire task; when Jose's test asks who should use the designation Ms. in filling out a form and Jose answers, with considerably more sociolinguistic sensitivity than the "correct" answer (unmarried female), "single female or married female who doesn't wish to state her marital status," he too must be marked wrong. Program staff are aware that the tests and the scoring procedures may not accurately reflect students' knowledge: The director says she feels the scoring is too subjective, while one of the staff members comments that he doesn't know "what [the test] tells you." Yet, there appears to be a consensus in the program that these skills are the literacy these students need to succeed, and the program must do all it can to help them learn them.

At the same time, however, the *Abriendo Caminos* program embeds this literacy as cultural practice at every level of context from the macro level of Puerto Ricans as Latin Americans to the micro level of interaction in the classroom. Consider the following, taken from my field notes.

October 19, 1989

Lilliam tells the Spanish GED class that she saw a program on TV last night that gave her an idea. She tells them that though we are all poor here, we know there are people in Latin America who are much worse off, and she proposes that the class adopt a Latin American child through a reliable agency like the church. They will send a certain amount of money each month (about $21, or $2 a piece) to provide the child with clothing, food, medicine, books. They will correspond with the child. They will really make a difference in the life of the child. The class is immediately in favor of the idea. Marilyn asks what will happen when they graduate; Lilliam assures her that she and her next year's class will follow through with the child. Nilsa wonders if they could support two; Lilliam suggests they start with one to see how it goes. As the discussion continues, Nilsa eventually starts to wipe her eyes. She has been moved to gentle tears (these are genuine, and she suffers some good-natured teasing about it). After the class approves the plan, Sonia, as class secretary, agrees to call the agency. The class prepares a poster announcing their decision and posts it around the building.

October 12, 1989

The first thing I notice upon entering the building today is an election poster for Minitza, one of the students in the Spanish GED class. Neida tells me that the students are campaigning this week for their elections next week: each class elects its officers, who in turn elect the representatives to sit on the ASPIRA Club Federation board, who in turn elect a representative to sit on the ASPIRA board. Officers participate in conferences and retreats focusing on developing leadership skills.

When I arrive at the class, the students are preparing posters for the election. They have written a rap song, which they perform for me; Nilsa speaks and others provide the back-up. Although it doesn't appear rhythmic or rhymed as written, when performed it is.

The words of the rap are as follows (exactly as written by the students, with my translation):

Let's Rap

Dejé la escuela	I left school
a los Quince años	at age fifteen
y vine a Aspira a	and I came to Aspira to
Terminar el cuarto	finish my senior
año.	year.
Coro: Aspira, Aspira	Chorus: Aspira, Aspira
Yo soy Lourdes y te	I am Lourdes, and I
digo a ti que mi	say to you that my
presidencia Te	presidency
conviene a ti.	is to your advantage.
Coro: Aspira, Aspira	Chorus: Aspira, Aspira
Y ahora yo le digo	And now I say to
a jóvenes como yo,	young people like me,
Que día a día le	that day after day
gusta el vacilón, que	enjoy wasting time, that
vayas a la escuela y	you better go to school and
aprovechen la ocación.	take advantage of the opportunity.
Coro: Aspira, Aspira	Chorus: Aspira, Aspira
y terminando este	and once finished
rapeo y empezando	this rap, and starting
aquí, ahora yo te	from here, now I
pido que votes por mí.	ask you to vote for me.

Subsequently, before the election, another verse was added:

Llegué a Aspira	I arrived at Aspira
y empecé a saludar	and started greeting everybody
La maestra me dijo	The teacher told me to
ponte a trabajar.	get to work.

After the election, the program director asked the students to revise the rap, removing the verses about the election, and keeping the rest as an ASPIRA rap.

October 26, 1989

This Saturday, the GED classes will have a workshop at Edison High School, in which the GED students will meet in small groups with Puerto Rican professionals to learn what their professions are like.

November 30, 1989

While Lilliam is out of the classroom for a moment, Marinés, who is working on the science test, asks me which is the largest bird in America: the *águila real* or the *cóndor*. I say I think the *cóndor* is, but she seems quite sure it's the *águila*. Then Liberto and Lourdes get into the discussion, too; Liberto is saying *cóndor*, and Lourdes is not sure. When Lilliam comes back, they ask her, and she authoritatively answers, "cóndor," whereupon Lourdes and Marinés correct their answers, grinning sheepishly as they do so.

Each of these is representative of the way in which the *Abriendo Caminos* program not only affords its students opportunities to use the literacy skills they are acquiring, but also embeds the whole of their GED and ESL literacy learning in a cultural, institutional, and interactional context that recognizes and validates their identity as Puerto Ricans. The first case represents an opportunity for the class to act in solidarity with other Latin Americans; the second shows the *Abriendo Caminos* program's connection to a network of ASPIRA-sponsored organizations and programs that support the Puerto Rican community; the third exemplifies how the program draws on the Puerto Rican community to support the students' development; and the fourth reveals how the students accommodate the highly individualized competency-based program to the more collaborative learning approach they seem to prefer.

The monolingual–bilingual continuum: Reinforcement of cultural identity in two languages

Entry from my field notes:

October 5, 1989

After observing the very lively discussion in today's reinforcement session, I express some surprise to the teacher that most of these young people had never visited *Taller Puertorriqueño* (a Puerto Rican cultural arts center a few blocks away from where the GED program is housed) until yesterday. This leads to a discussion with him about how, growing up here, with the media coverage of their community, the young people's Puerto Rican identity in some ways

comes to reflect the external rather than the internal point of view. That is, they take on the identity portrayed in the media (drugs, violence, dropping out), rather than the identity within the community, represented, for example, by *Taller*.

Thus, when they first are acquainted with *Taller*, it really is an eye-opening experience, because they begin to realize that many of the things they know and live with are part of their culture, not just odd stray things (e.g., the way their mothers cook and care for them; the music; the fact that Puerto Rican women are "good to their men"; Puerto Rican good looks; the shared history; and so on), and they begin to feel some pride in being Puerto Rican.

Beyond embedding literacy as cultural practice, the *Abriendo Caminos* program explicitly teaches cultural awareness to its students in the reinforcement session, which meets during the third hour (alternating with ESL and work-orientation sessions) and is taught by the counselors. There are three counselors on the staff, who meet individually with each student for a half hour each week in addition to teaching the reinforcement sessions. The counselors take these sessions seriously; one counselor commented that once you give the students an opening and they begin to talk about values, goals, and so on, you must be conscientious about following through with them (personal communication, September 18, 1989).

As the counselor's comment indicates, the sessions are directed toward self-awareness, toward helping students explore their own values and goals. For example, I observed sessions on the emotional and practical issues surrounding leaving home (September 28, 1989), on personal attributes (September 18, 1989), and on a self-directed search for career possibilities (October 19, 1989). The core of the sessions, however, is the validation and promotion of the students' Puerto Rican identity. The counselors feel that one reason that students do well in the *Abriendo Caminos* program, despite having dropped out of school, is that here it is O.K. to be Puerto Rican, while at school it's as if everything they are is working against them from the first day they show up (personal communication, September 18, 1989).

Of course, the *Abriendo Caminos* program as a whole reinforces the students' Puerto Rican identity. The program administrators, teachers, and counselors are all Puerto Rican. The center is named for Antonia Pantoja, Puerto Rican educator and founder of ASPIRA. The

walls of the center are decorated with posters portraying scenes from Puerto Rico and famous Puerto Ricans such as actress Rita Moreno and former baseball player Roberto Clemente; tables display brochures printed in English, Spanish, or both, advertising, for example, a concert by the *Asociación de Músicos Latinos* (Latino Musicians' Association, AMLA) or workshops and colloquia sponsored by the Arts of Social Change/*Las Artes del Cambio Social*. Nevertheless, it is in the reinforcement sessions that students have the opportunity to explore their Puerto Rican identities, as exemplified in the note quoted above.

What is particularly significant when the program context is considered in terms of the monolingual–bilingual continuum is that Puerto Rican identity reinforcement is seen as crucial for both the English-medium and Spanish-medium GED classes. Both groups take up exactly the same issues and explorations in their reinforcement sessions. The counselors prepare materials in both languages; for example, during the discussions after the students' visits to *Taller Puertorriqueño*, it became clear that the counselor had prepared both an English and a Spanish version of the questionnaire that they were using as the basis for discussion. On another occasion, Jose explained to me that he takes care to do a good job whenever he prepares written material in Spanish, because he feels it conveys an important message to the students. However, the crucial content of the sessions, from the participants' point of view, is not the language in which they are conducted, but the exploration of Puerto Rican identity that they pursue. For this case, anyway, language is apparently separable from ethnic identity.[3]

The oral–literate continuum: Some tensions regarding language use

> Well, we have to report to our funding source, and they're not bilingual, so all of the documents that we leave behind, other than the curriculum and the course lesson plans for the Spanish GED class . . . mostly we gear toward English. Now you'll find when the staff sits together that we talk Spanish. The Spanish-dominant staff will naturally write in Spanish, but when they submit reports they're submitted in English, because, again, if we're audited, and we usually are at the end of the program year, they will send people down to review files.
>
> (Interview with program director, May 7, 1991)

Entry from my field notes:

October 12, 1989

As the Spanish GED class discusses the mock interviews to be held tomorrow with all the classes, it comes out that some of the students in this class are very unhappy with the way some of the students in the English GED classes have been behaving toward them, and in general. Nilsa and Marines go on at length, in very rapid Spanish, about the rudeness of these other girls, even to the guest speaker yesterday.

A look at the program context from the perspective of the oral-literate continuum, however, reveals that there are some tensions between the languages and their speakers, despite their shared Puerto Rican ethnic identity. For one thing, it becomes clear that there is an unequal relation between the two languages: The predominant pattern in the program is that of powerful English literacy embedded in Spanish oral language use. Spanish is of course used most extensively in the Spanish GED class, yet even there it is often used primarily to embed English literacy; for example, students use Spanish to ask for clarification during their CCP ESL diagnostic test (field observation, October 5, 1989). In the English GED class, the use of Spanish is even more restricted: Magda conducts their entire reinforcement session in English, the handout is in English, everything she writes on the board is in English, and her discussion is in English, with a very few codeswitches into Spanish to issue a directive to the students (field observation, September 18, 1989). Again, what oral Spanish use there is embeds English literacy.

Secondly, there are differences between the Spanish- and English-medium students, differences that at times flare up in intergroup tensions. While the English-medium students tend to be those born or at least mostly raised on the mainland, the Spanish-medium students tend to be island-born and raised. This means not only that the schooling of the two groups has been in different languages, but also that they likely reflect slightly different sets of values and behaviors associated with the mainland and island settings, respectively. The program director comments, for example, that the program has a hard time convincing the English GED students to accept help, while the Spanish GED students are very open to help and tutoring. The excerpt quoted above shows how the Spanish GED group gets upset with the English GED group for what appears to them as lack

of politeness. These are little tensions which seem to reflect a larger underlying tension accompanying the changing biliteracy configuration as both groups acquire English literacy. It is to the program's credit that it acknowledges and addresses these tensions, making it possible for both groups to graduate at year's end.

Conclusion: The Autonomous Model Is Not Truly Autonomous

The GED program owes its success at least in part to the fact that it manages to embed literacy as a cultural practice even while it approaches teaching it as a cognitive skill. Ferdman (1990) notes that

> at the individual level . . . the process of becoming and being literate involves becoming and being identified with a particular culture. . . . When there is a mismatch between the definition and significance of literacy as they are represented in a person's cultural identity and in the learning situation, the individual is faced with making a choice that has implications for his or her acquisition of reading and writing skills. (pp. 189-195)

Recognizing this, the program attempts to foster its students' success by making it possible for them to acquire the discrete reading and writing skills they need for attaining high school graduation credentials and employment in U.S. society, while at the same time representing and reinforcing a cultural identity that they can accept. Indeed, we suggest that it is the very fact that the program emphasizes and reinforces literacy as cultural practice that enables the students to obtain the GED credential and thus demonstrate their mastery of literacy as a cognitive skill.

In the Cambodian adult ESL class, many of the students (excluding the few who are not literate in Khmer) are engaged in learning a second literacy. They bring to this task both Khmer language skills and previous literacy acquisition experience. They are building a bridge to a new language and culture using the materials and skills from a familiar one. As the students are becoming adept at handling two very different cultures, it should not be surprising that they can handle, even depend on, a language learning environment (a culture of literacy) built upon a fusion of two different approaches to language learning and literacy acquisition: cognitive skills and cultural practice.

While the autonomous model of literacy arises from a peculiarly monocultural notion of a single, standardized, schooled literacy (see Cook-Gumperz, 1986), the ideological model reflects a pluralistic view. It is hardly surprising, then, that it is in these situations of *bi*literacy, where participants are daily involved in negotiating the coexistence of languages and cultures, that we find evidence of the coexistence of the two models, specifically of the autonomous model circumscribed by the ideological model.

Notes

[1] ASPIRA is a private, non-profit, Puerto Rican organization, founded in 1961 in New York City. One of its primary aims is to promote education among Puerto Rican youth. The name of the organization refers to its unique message to youth—"Aspire to a better and more fulfilling life" (Micheau, 1990, p. 547). The Pennsylvania branch of ASPIRA was founded in 1969.

[2] The Spanish GED contains a section testing students' English abilities; this section of the test must also be passed for students to be awarded their high school equivalency certificates.

[3] Micheau (1990) found language to be only one of seven defining characteristics of "Puerto Ricanness" in the Philadelphia Puerto Rican community, the others being island ancestry, mixed ethnic and racial heritage, knowledge of/pride in culture, Puerto Rican values, political consciousness, and community responsibility and sacrifice.

References

Cook-Gumperz, J. (1986). *The social construction of literacy*. Cambridge: Cambridge University Press.

Edelsky, C. (1986). *Writing in a bilingual program: Habia una vez*. Norwood, NJ: Ablex.

Ferdman, B. (1990). Literacy and cultural identity. *Harvard Educational Review, 60*(2), 181-204.

Hornberger, N. (1989). Continua of biliteracy. *Review of Educational Research, 59*(3), 271-296.

Hornberger, N.H. (1990). Creating successful learning contexts for biliteracy. *Penn Working Papers in Educational Linguistics* 6(1), 1-21. (ERIC Document Reproduction Service No. ED 335 930)

Kulick, D., & Stroud, C. (1993). Conceptions and uses of literacy in a Papua New Guinean village. In B. Street (Ed.), *Cross-cultural approaches to literacy* (pp. 30-61). Cambridge: Cambridge University Press.

Micheau, C. (1990). *Ethnic identity and ethnic maintenance in the Puerto Rican community of Philadelphia*. Unpublished doctoral dissertation, University of Pennsylvania, Philadelphia.

Serrán-Pagán, G., Acosta, A., & Márquez, A. (1987). *Examen de equivalencia de la escuela superior en español*. New York: Arco.

Street, B. (Ed.). (1993). *Cross-cultural approaches to literacy*. Cambridge: Cambridge University Press.

Wagner, D.A. (1990). *World literacy in the year 2000: Introductory thoughts on research and policy*. Paper prepared for the Conference on World Literacy in the Year 2000, Philadelphia.

CHAPTER 8

Putting a Human Face on Technology: Bilingual Literacy Through Long-Distance Partnerships

Dennis Sayers
New York University
Kristin Brown
University of San Francisco

This chapter describes an effort to foster intergenerational bilingual literacy by setting up technology-mediated partnerships between parents of school-age children over long distances. The ethnic and linguistic minority parents who participated in this effort were from San Diego, California and Denver, Colorado in the United States, and from Caguas in Puerto Rico. This partnership between distant parents is part of a larger computer-based communications network of teacher partnerships coordinated by two Schools of Education, the first at Brooklyn College of the City University of New York and the second at the University of Puerto Rico. The network's name, *De Orilla a Orilla* (Spanish for "From Shore to Shore," and usually shortened to *Orillas*) was chosen to reflect the reality of collaborations that span oceans and continents.

However, the Spanish name *Orillas*, while highlighting the network's origin in Puerto Rico, nevertheless obscures its multilingual identity, because teachers and students (and recently, parents) communicate in, among other languages, French, Haitian Creole, English, Spanish, various English-based Caribbean Creoles, and American and French Canadian Sign Languages. *Orillas* is most definitely multinational; indeed, 100 team-teaching partnerships have been formed, principally among educators in Puerto Rico, Quebec, and the United States, but also including teachers in English-speaking Canada, Costa Rica, France, Japan, Mexico, and several French- and English-speaking islands in the South Pacific.

While *Orillas* teacher partnerships began in 1985, partnerships between parents and between parent-child dyads within *Orillas* have been initiated only in the last few years. The network has been overwhelmingly concerned with distance te- n-teaching projects, often employing computer-based electronic mail. That is, partner teachers communicate regularly to plan and implement jointly executed, collaborative teaching projects between their classes. Typical projects have included (a) shared student journalism and publishing; (b) comparative research, including dual community surveys, joint science investigations, and contrastive geography projects; and (c) both traditional and modern folklore compendia, extending from oral histories and collections of proverbs to children's rhymes and riddles, lullabies and game songs, and fables and folktales.

To coordinate their collaborative works-in-progress, teachers use electronic mail to stay in frequent contact and to transmit their students' work. While using up-to-date technology, *Orillas* has employed an educational networking model first developed by the French pedagogue Celestin Freinet in 1924 (Clandfield & Sivell, 1990; Lee, 1980, 1983; Sayers, 1988b). Following Freinet's model, *Orillas* is not a student-to-student penpal project, but rather a class-to-class collaboration designed by partner teachers who have been matched according to common teaching interests and their students' grade level.

Given the class-to-class focus of *Orillas*, it is not surprising that teacher collaborations and student projects, rather than parent partnerships, have received the greatest share of attention from the educational research community. For example, *Orillas* has been described as an exemplary curricular project for bilingual education programs (Cummins, 1986, 1988; Cummins & Sayers, 1990; Faltis & DeVillar, 1990; Figueroa, Sayers, & Brown, 1990; Sayers & Brown, 1987), English as a second language programs (Cazden, 1985), foreign language programs (Green, 1990; Willetts, 1989), and writing programs (Figueroa, 1988). The network was also cited as a noteworthy project for linguistic minority students by the U.S. Congress Office of Technology Assessment (Roberts & staff, 1987):

> Long-distance networking capabilities of computer-based technologies are being used to encourage [these] students to write and communicate more effectively in highly functional contexts, both in their native language and in English. When used

> in this context, the computer can provide a means for students to break out of the traditional mode of thinking, to enhance their sense of mastery, and to enrich the learning experience by providing access to role models and speakers from their native culture. (p. 96)

Finally, DeVillar and Faltis (1991) judged *Orillas* "certainly one of the more, if not the most, innovative and pedagogically complete computer-supported writing projects involving students across distances" (p. 116).

In addition, there have been several research studies of *Orillas* teacher partnerships, encompassing both qualitative (Sayers, 1988a, 1989, 1991) and quantitative research designs (Sayers, in press). To date, no formal research study has centered on long-distance parent collaborations mediated by technology. However, we have conducted an informal study (based on observations completed over the course of a full academic year, together with interviews of teachers, parents and their children, and numerous videotapes) at an after-school parent-child computer course offered at Sherman School in San Diego, California, one of the *Orillas* sites that formed a parent partnership with similar after-school groups in Denver, Colorado and Caguas, Puerto Rico. We believe that the results of our informal investigation of parent partnerships illustrate many of the findings of the more formal studies of teacher collaborations in *Orillas*, with intriguing implications for family literacy programs for minority language parents and children.

The Sherman School After-School Computer Course for Parents and Their Children: A Portrait

Sherman School is located in Barrio Sherman in San Diego, California, in a neighborhood principally composed of African-American, Latino, Cambodian, and Euro-American communities. There have been many attempts by educators from Sherman School to involve parents in school activities and to establish literacy classes for the parents of the children at this school. However, owing to a number of factors familiar to all who have worked with low-income immigrant adults, many difficulties have been confronted. For example, heads of single-parent families often work long hours or during second or third shifts and have little time to devote to school-based

activities, such as the Parent Teacher Organization or parent-teacher conferences. Teachers affirm that in spite of high expectations and great concern expressed by most parents for their children's success in school, few parents actually get involved in school-community outreach efforts.

Language differences and wide language variation pose barriers between school professionals and parents; not only do parents have limited proficiency in Standard English, they are from a number of language and dialect backgrounds, including Spanish, Khmer, and Black Vernacular English (BVE). Inside the family unit, most parents are devoted to improving the quality of life for their own family; but within Barrio Sherman, sharp divisions among community members are revealed in the frequent strife between gangs, which pits the Cambodians and the African-Americans in an uneasy alliance against the larger Latino community. Drug abuse in the community is also a major destabilizing force, and an overriding concern of both teachers and parents is to make Barrio Sherman a safer place to live through confronting the drug problem.

At the start of the 1989-1990 school year, a new attempt was made by the Sherman School to establish literacy classes for adults in the community. Both the teacher of this literacy class, Maria de Lourdes Bouras, and the school contact person, Laura Parks-Sierra, had worked extensively with students in the *Orillas* Project in previous years and had discovered the effectiveness both of using computers with a variety of communication activities and of having students work in teams. Together, they made the decision to design their literacy class for students *and* their parents. The design of the literacy course would be similar to the approach they had already used in *Orillas*: Local partners would work on the computer, learning to use it both as a writing tool (word processing) and as a communication tool (telecommunications). Next, the many partners who made up the Sherman School literacy course would form another kind of partnership with distant sister classes, using electronic mail. Finally, what they wrote would eventually be published locally in a newsletter distributed in the community. The only difference between previous *Orillas* projects and this literacy course would be that this time the local partnerships would be made of a parent and his or her child.

This decided, an evening computer class was announced during regular school hours to all second- through sixth-grade students. There would be no cost to join, but it was clearly stipulated that students had to be accompanied by one or more parents for each computer class. The teachers reported that, unlike other messages designed to reach parents (often "lost" due to language differences or incorrect addresses given by worried parents with uncertain immigrant status), this announcement was efficiently delivered to their parents by Sherman's students, for whom computer time was a favorite school activity. On the first night, dozens of parents appeared, and even more unaccompanied students; however, the teachers maintained their parent-child partnership policy and turned away those students who had not brought parents. Parents who enrolled commented that they were tired after long days at work and of caring for families and would not have attended except for their children's insistence.

Teachers said that parents were intrigued with the prospect of learning how to use computers with their children, and particularly with the idea of communicating with other parents and children in far-off places like Colorado and Puerto Rico. They were especially interested to hear that other parents were involved in similar projects, and many who had seen little of the United States were curious about life in these distant places. They liked the idea of helping their children in school and also of helping them acquire technology skills. Students who attended the parent-child computer class received a certificate with the name of the parent and child printed on it to deliver to their regular classroom teachers the following day; classroom teachers had agreed to announce the names of parents and children who had participated in the initial literacy classes to encourage continued attendance.

At the outset, participants had some difficulties just in learning to use word processing and other software. Explanations to the group seemed labored: The teacher was bilingual (English-Spanish), but English speakers initially expressed some impatience at having to wait during translations, at the time thus taken from more important, computer-related tasks. Parents were at very different levels of English proficiency. Moreover, Ms. Bouras reported her sense that, during initial computer projects, whoever was at the keyboard assumed control, creating barriers for others to join in as full participants.

Two emerging themes: Communication and teamwork based on sharing of skills

Once communications from the distant parent groups began to arrive, some interesting changes seemed to take place in parents' and students' attitudes, both toward engaging in computer-based collaborations and toward language use. The teacher and school contact person reported that parents and students began to see the computer as a tool for communication. They began to evidence more comfort with the new technology, because communication was something everyone understood and felt competent at. The group, faced with the task of representing and describing San Diego in response to the initial questions of the distant groups, became more cohesive.

To help introduce themselves to their partner groups in Colorado and Puerto Rico, the Sherman School parents and children decided to make and send a "cultural package" that featured a book to which everyone could contribute, regardless of their level of literacy in their mother tongue or in English. For example, the Cambodian family in which parents could not speak, read, or write in English, brought in the most magazine articles and pictures. Together, parents and their children elaborated a clear picture of the book they wanted to send; the parents and children worked in teams to create the different sections and then shared their writing and the pictures they had gathered with the rest of the group. By the time the parents had helped one another and the children had helped their parents, the cultural package book had become a seamless group product where the individuality usually expressed in the concept of authorship had become unimportant.

Moreover, the status of the Spanish speakers changed when the majority of the text began arriving in Spanish. Ms. Parks-Sierra captured on videotape the first night the group logged on to the electronic mail system to read messages. Parents and children were pulling their chairs as close as possible to the computer, waiting for the phone call to go through. Soon the electronic messages from Colorado and Puerto Rico began to appear letter by letter on the screen as though the computer had become a teletype machine. When Ms. Bouras translated the messages from Spanish, the English-speaking parents started questioning her and other Spanish-speaking

parents to make sure that they understood everything; in Ms. Parks-Sierra's words, "These discussions really seemed to bring the group together."

Suddenly, proficiency in Spanish became highly prized as the texts that everyone was so interested in reading were written in Spanish. The English speakers, rather than relying exclusively on the teacher for information, would turn instead to Spanish speakers. As text arrived in Spanish, English speakers saw the importance of devoting time to translation, even insisting that translation be done carefully to ensure that everyone understood the messages. English-speaking parents who previously had worked on their own sought seats next to Spanish speakers and were active in assuring that the teacher had translated every detail (at times double-checking with their local bilingual expert).

Unlike previous literacy courses sponsored by the Sherman School, attendance at the parent-child computer course justified continuing the class for the entire academic year. Parents and children attributed this, in large part, to the communications with the faraway parent groups. There was great curiosity about what the distant partner classes would write. Parents and students said that they did not want to miss class in case any electronic mail might have arrived from the other groups. Evidently, their distant correspondents felt similarly, as shown in this message from Denver:

> *Hi! My name is Guadalupe and I have a sister her name is Claudia. Colorado is a very nice place to live in. We're here tonight because we came to write back to you!*
>
> *Sincerely,*
> *Guadalupe and Claudia Ortiz*
> *(February 12, 1990)*

Another factor may have been the prestige associated with working in a project that focused on long-distance communication. Ms. Bouras reported that several parents told her that when they got together with friends and family over the weekend and they had mentioned their using the computer to write to parents in Puerto Rico and Colorado, their friends had been very impressed. The Sherman School parents seemed honored that people from so far away would be interested in what they had to say, and therefore

they worked hard both on their electronic messages and on the book for their cultural package, in order to give the distant parents the clearest impression of Barrio Sherman, Sherman School, and San Diego.

Before the end of the academic year, the Sherman School parents had collaborated in the production of numerous highly literate publications. A description of these publications, followed by sample writings, illustrates the range of emergent literacy skills being shared between parents and their children. Please note that original spellings have been maintained throughout and that, except where indicated, translations are those provided by parents and children. The Sherman School Computer Class published the following:

• A bilingual booklet of parent-teacher conference guidelines distributed to all of Sherman School's parents and teachers—an outcome of close consultation with several teachers.

Tu participación es importante:
¿Qué es una conferencia familiar?

Una conferencia familiar es cuando nos reunimos con los maestros de nuestros hijos para hablar sobre su aprovechamiento escolar y su comportamiento en la escuela. Es el momento de aprender más acerca de nuestros hijos y sus maestros . . . .

Let's Lead the Way: What is a Family Conference?

A family conference is an update on your child's progress and to discuss their future goals. It is a network between teacher, student, and parents.

• Bilingual books, including a parent-child guidebook to San Diego for the Sherman School Library's permanent collection and for the Puerto Rico and Colorado parent groups, describing interesting places for families to visit in San Diego—the result of collaboration between children and their parents.

The San Diego Zoo

I like the San Diego Zoo because it is a very nice place to go and you can see a big snake and a tall giraffe. In the San Diego Zoo you can find a lot of animals like rabbits, polar bears, big brown bear, and the eagles in the trees. The tallest animal of all is the giraffe and the fattest animal of all is the elephant.

There are huge bears also. The animal I like most is the giraffe because it is tall. My mom likes the monkey the most... The tigers like meat and they are very big. The best thing I like about the tiger is that it runs fast and has sharp teeth because I would like to have sharp teeth like that too. My mom hates the tiger because it kills animals and people. The San Diego Zoo is like the San Diego Wild Animals Park because they have almost the same numbers of animals. The trolleys look the same.

(Keovong Sar and Eam, Cambodian son and mother)

• An international *refranero*, or book of proverbs, for which parents consulted their extended families to create lists of proverbs (and how they are used) that were shared with the parent partner groups as well as with all the other teacher partnerships in *Orillas*—a consequence of sharing among families, the local community, and the wider world of *Orillas* participants.

Proverbio: Dios aprieta pero no ahorca.
[Translation: God may squeeze you but he won't choke you.]

Explicación: Por que cuando tiene uno algun problema siempre ay alguna forma para resolberlo con la bolunta de dios. [Because when one has some problem there is always some way to solve it, God willing.]

Situación: Un dia andabamos tres amigas en un carro y tubimos un acidente con un troque de la Cuidad y quedamos atrapadas, y una de nosotros dijo no te preocupes dios aprieta pero no ahorca, i fue sierto porque no nos paso nada todos salimos bien porque nadie salio golpeado gracias dios. [One day two friends and I were driving and we had an accident with a City truck and we were trapped. One of us said not to worry "Dios aprieta pero no ahorca," and that was true, because none of us were hurt, thank God.]

(Hnely Guzman E. and Isabel García, Mexican-American mothers)

• An international collection of articles on self-esteem and technology, for which the Sherman School computer class worked with professors and graduate students from Harvard University Education School as well as with psychologists, teachers, and other parents and children from Argentina, Mexico, Puerto Rico, Quebec, and the United States.

I think that a computer is good for children as well as adults because it let you put down your thoughts and feelings and express your opinions. . . . I thing it's great that the children are learning about computers and how they work and how to use them and write their own stories and to read what they have written. I think it gives them a good feeling inside to know that they did it and that they are as important as we are.

In respons to the question, on learning by thecnology, it is my personal belive, that it is a good way to prepare are children and our selfs, to meet the future for it is chainging dayly, it is nothing to be afreid of, it is like turning on your television or dialing you'r, phone the deferance is that here you are apon samething new, and if you do not have similiarity with the equipment, it natural to feel unease about thecnology.

1. In the case of computers, at first you may feel not capable to be able, to manipulate it's sistem, as you start plaing the key board, you begun to gett amuch better feeling about wath you are doing, it then becomes a chalange betweing you and the sestem, until you are able master it.

2. It is also useful in teaching, for it helps to support a subjet, by bringing in graffic suport to the teacher, to esplain better, and helping the students to understand better the subjet.

Why I like Computers

When I use the computer I fill nervous inside my body because when you start to use a computer you really have to get ready. I think computers help students because if they do not know how to read the computer help him or her to say it. I think computers are important because if someone does not have a phone and they only have a computer and they could use the computer to call the people they want to call. The computer was after all made for children to help them learn. I like computers and I wand to know more about computers.

• A community newspaper, the product of collaboration with teachers and administrators and children at Sherman School.

Exemplary Mother

Eam is originally from Cambodia, she is medium high has a beautiful black hair and is always smiling. She started coming to the computer class almost from the beginning She never missed a class and she always had a positive attitude toward everybody. Eam looks so young that you will never beleive she is thirty six years old. She was a mother of nine children, but three of them died in the war in Batanbag, in Cambodia.

Eam was 15 when she got married, eventhough this sounds too young, this is normal for Cambodians. . . . Eam didn't want to have children right away but contraceptive methods were not very advance in Cambodia so she got pregnat right away. Her new family grew fast and she had to work harder and harder, since in Cambodia your children depend very much from the mother's care. It was fascinating talking with Eam and getting to know such a different culture, but what makes this story more facinating is the fact that no matter where in the world we are or where do we come from the importance of being a caring and loving parent is always the key for our future generations. And Eam is one of this great mothers that has helped six children grow up with an incredible future in front of them.

In a very real sense, these publications by parents and children would not have been possible without their electronic partnerships, since each formal publication was preceded and accompanied by informal dialogues, among themselves and with distant classes, to identify issues and topics for writing, to test developing ideas, and to elaborate drafts.

Throughout the 1989-1990 academic year, parents and children in the computer class worked in teams. To be sure, all teams did not function identically. Some parents and their children shared equally all stages of writing (prewriting, drafting, and revising and editing) and translating (from their home language to English and back).

Other teams divided the writing task in a variety of effective ways, with some parents playing the key role of topic "definers" in the home language while their children acted as keyboardists and language interpreters and "refiners" in English. Certainly, all parents and children, while working in teams, showed evidence of moving toward greater independence; as an example, for the year's final project, the community newspaper, every parent submitted articles for publication. Perhaps the term "teamwork" does not adequately convey the complex literacy activities that developed among the Sherman School parents and children as a result of their collaboration with distant *Orillas* parent-child groups.

These occasions provided by *Orillas* for displaying literacy may better be viewed as sequences of nested, interlocking collaborations. Let us take as an example an introductory letter written early in the year to distant parent groups by Eam (the Khmer-speaking 36-year-old Cambodian "Exemplary Mother"), Keovong (her bilingual son), and Maria (his Spanish-English bilingual schoolmate).

> *Dear Parents and children,*
>
> *Our names are Keovong, Maria and Eam. I am Keovong the one that is typing because I am good at typing. I was born in Phillipines and my parents are from Cambodia. My mom come to computer class. My mom is writing in Cambodian and someone will translate it in English or Spanish. My dad used to come with me to the computer. Many of my people had died in Cambodia. My land has been taken by the bad people. But now I am far away from my home land and I am safe in San Diego.*
>
> *Your new friend,*
> *Keovong Sar, [October 1990]*

Clearly, this text has evolved from a rich, intergenerational learning situation with great potential for fostering biliteracy skills—a mother and her son (and in the first writing, a Spanish-speaking friend) seated together at a computer, using two languages to plan what they will coauthor, and sharing linguistic, cultural, or technical talents at which one or another is more skilled.

This was the first stage in the sequence of nested collaborations. Next, the writing had to be rendered into Spanish by Maria so that it could be shared with other Spanish-dominant parents for discussion

prior to sending it over the electronic mail system. This involved a focused collaboration between the bilingual (English-Khmer) child and other bilingual (Spanish-English) parents and children. Of course, the second collaboration had a clear goal—the linguistically accurate and culturally faithful rendering of what the original collaboration had set out in writing. Other nested collaborations followed in interlocking sequence once the San Diego group had sent their message out. For example, parents and children in San Diego and the other *Orillas* sites often sent messages out only in the original Spanish or English; that is, they did not copy into the computer their translations of writings, using them strictly for internal discussion. Therefore, whenever a message was received, a further occasion for translation naturally arose, leading to new sequences of nested and interlocking collaborations.

Previous Formal Research into *Orillas* Teacher Partnerships

All four studies on *Orillas* Teacher Partnerships, three qualitative studies (Sayers, 1988a, 1989, 1991) and a quantitative study (Sayers, in press), have involved bilingual program students of Puerto Rican heritage who used computer-based telecommunications to build literacy skills in both their mother tongue, Spanish, and their second language, English. The three qualitative studies were conducted in a New England urban school district with a long record of advocacy for the educational rights of language minority students. The studies underscored the heterogeneous character of bilingual classes. In this city, the typical composition of a fourth- or fifth-grade bilingual class is 25% Spanish-dominant new arrivals, and 75% bilingual and English-dominant students who are frequently in their last year of bilingual schooling. The Spanish-dominant children were all born in Puerto Rico, while most of the English-dominant children were born in the United States. All students in the pilot studies, regardless of their language dominance, were from Puerto Rican families and spoke Spanish in their homes.

The qualitative studies also revealed that instructional delivery in bilingual classrooms at this level was predominantly in English, which placed the Spanish-dominant students at a marked disadvantage vis-a-vis their bilingual and English-dominant classmates. Spanish was principally used by bilingual teachers for quick summaries and to ask students if they had questions on material previously covered in

English. The negative language attitudes of the English-dominant students toward their Spanish-dominant classmates was revealed in direct commands ("Talk English!"), deprecatory comments ("I can't understand you when you talk that Spanish") and through critical remarks upon hearing Spanish spoken by Spanish-dominant classmates ("I wish they wouldn't talk so fast that way"). Negative attitudes toward Puerto Rican culture were exemplified by one English-dominant U.S.-born Puerto Rican student when the topic was raised of *personas ilustres puertorriqueñas* (famous Puerto Rican historical figures): "What' she talkin' about? We don' got none of those 'round here" (Sayers, 1988a).

All three qualitative studies focused on student-directed small group activities as a vehicle for promoting the simultaneous development of literacy in both the home and second languages. The small group activity that was studied involved student-directed editorial boards. In this activity structure, students in both partner classes are nominated for joint editorial boards, which plan, coordinate, and supervise the production of a common bilingual newsletter.

In the initial study (Sayers, 1989), the partner class exchanges were between a fifth-grade bilingual class in New England and another bilingual class of the same grade level in California. All the students in the New England class were from Puerto Rican families who spoke Spanish at home, but for most of these students the dominant language for school activities was English. The California students were in a two-way bilingual program, where half the students were Anglos and half were from Mexican-American families who spoke Spanish at home; like their New England counterparts, most of these students interacted easily in English during school hours. Students in both the New England and California classes had been nominated for the joint editorial boards by their teachers, without regard for their relative proficiency in English and Spanish. Thus, it is not surprising that the amount of written communication in Spanish that resulted from the exchanges between these particular partner classes was minimal; there was little reason to tap the relatively weak, emerging Spanish skills of the Anglo students in California or the declining Spanish language skills of the English-dominant Latino students in both partner classes.

In the other qualitative studies (Sayers, 1988a, 1991), the same New England teacher was teamed with a teacher from Puerto Rico;

moreover, in the New England classroom, all Spanish-dominant students were assigned to the joint editorial board and matched with another student nominated by the teacher. A major finding of the second study was that, in the context of editorial board exchanges with a Puerto Rican partner class conducted entirely in Spanish, the prestige of the Spanish-dominant editorial board members increased, both in their own estimation and in that of their bilingual and English-dominant peers. The Spanish-dominant students became language and cultural experts whose skills were much sought after by their English-speaking classmates.

The quantitative study (Sayers, in press) focused on change in language attitudes among 89 students in four elementary school bilingual classrooms toward speakers of their home language, Spanish. Once more, the students participated in technology-based long-distance exchanges in partnership with students in Puerto Rico. The research contrasted two instructional approaches, one centering on student-led small group work and another emphasizing teacher-facilitated whole group work. The study sought to determine under which of these two conditions increased status and prestige are conferred upon speakers of the minority language. Students were identified as Spanish-dominant, bilingual, or English-dominant on the basis of holistically rated translation tasks, teacher assessments, and their performance on reading comprehension tests in both languages. Both sociometric and stereotypic measures of language attitude change were employed.

Two measures of the dependent variable, change in language attitude, were employed. For the cross-language dominance group inventory, students employed photographs of classmates as markers and individually rated, using a four-point continuum, her or his classmates on five attributes: how hard-working, how friendly, and how easy to work with they are, as well as how helpful they are to the evaluating student, and how helpful they are to the teacher. For the matched guise task, two guises (a Spanish and an English version of a short narrative) were read onto an audiotape by a bilingual Puerto Rican girl unknown to the subjects. Students listened to the tape in groups and evaluated the Spanish and English recordings on a four-point scale for four constructs: correctness, the listener's personal identification with the speaker, appropriateness of the language for school, and the speaker's likelihood of achievement.

Analysis of Variance (ANOVA) by regression yielded results that confirmed the research hypothesis that improvement in students' language attitudes toward Spanish speakers would occur in all classes, suggesting that technology-mediated exchanges with distant colleagues from the students' home culture indeed constitute an intervention that can produce language attitude changes even over a brief period of five months. Results from the sociometric cross-language dominance group inventory supported the prediction that greater improvement would occur in small-group-work classes, while the stereotypic matched guise indicated greater improvement in the whole-group-work classes.

Implications for intergenerational bilingual literacy projects

One implication of this research into teacher partnerships that also appears relevant for parent-child partnerships is the importance of between-class variables, that is, of finding a productive match between classes involved in distant collaborations. This is seen clearly in the very different outcomes of the initial qualitative study of an *Orillas* exchange and the remaining qualitative investigations. Partnerships between teachers of a New England bilingual class and a California two-way bilingual class did not create a context conducive to the promotion of Spanish and English simultaneously, since English was the majority language in both communities, as well as the home language of many of the California students. This situation changed when a match was formed between the New England bilingual class and a class in Puerto Rico, where Spanish was the dominant language used both at school and in the children's homes.

In this latter situation, namely involving partnerships between a U.S. teacher and a Puerto Rican colleague, a learning context was established that privileged both Spanish language competence and awareness of Puerto Rican culture. The prestige of the Spanish-dominant new arrivals was enhanced in the eyes of their classmates as they became cultural experts who were in a particularly advantaged position to help interpret and clarify messages from their Puerto Rican partner class. At the same time, the balanced bilinguals played a special role as translators, in the most profound sense, of both linguistic and cultural knowledge, working to mediate communications between English-dominant classmates, on the one hand, and both their Spanish-dominant classmates and the distant students in Puerto Rico, on the other.

In this fashion, *Orillas* provided the students with multiple opportunities to display and share their changing linguistic competencies and varied cultural experiences within their classrooms, thus fostering genuine bilingualism and the creation of authentic cross-cultural knowledge between distinct subgroups of Puerto Rican language minority students. Similarly, the partnerships formed by the Sherman School computer class underscore how important the language used by the distant partner class can be in prompting closer collaboration between linguistic minority groups, fostering (indeed, almost forcing) repeated occasions for parents and children to translate for one another and thus share their differing cultural and linguistic skills.

A related implication of the quantitative research on *Orillas* teacher partnerships concerns the importance of within-class collaborations. That study established that pairs and small groups of students offer more opportunities for the kinds of interactions that can lead to significant attitude change toward classmates (Sayers, in press). Because we have not conducted a formal study of the Sherman School computer class, it is impossible to isolate what specific factors account for the evident success of these long-distance parent-child partnerships as settings for building literacy. However, the parent-child dyads and triads that were formed at Sherman School clearly lent themselves to the type of productive sequences of nested and interlocking collaborations to which we previously referred.

What the experience of the Sherman School parent-child computer class does suggests to us is that technology-mediated exchanges like *Orillas* can serve as intergenerational learning contexts, which make parents partners in the building of their children's literacy, and which help them to become more active agents in the promotion of their own literacy skills. By sharing linguistic, literacy, and cross-cultural skills, they are forging tools to empower themselves as they shape their own communities.

References

Cazden, C. (1985, April). *The ESL teacher as advocate*. Plenary paper presented at the annual conference of Teachers of English to Speakers of Other Languages, New York, NY.

Clandfield, D., & Sivell, J. (1990). *Cooperative learning and social change: Selected writings of Célestin Freinet*. Toronto: Our Schools/Our Selves.

Cummins, J. (1986). Cultures in contact: Using classroom microcomputers for cultural exchange and reinforcement. *TESL Canada Journal/Revue TESL du Canada, 3*(2), 13-31.

Cummins, J. (1988). From the inner city to the global village: The microcomputer as a catalyst for collaborative learning and cultural interchange. *Language, Culture, and Curriculum, 1*, 1-13.

Cummins, J., & Sayers, D. (1990). Education 2001: Learning networks and educational reform. In C. Faltis & R. DeVillar (Eds.), *Language minority students and computers* (pp. 1-29). New York: Haworth.

DeVillar, R., & Faltis, C. (1991). *Computers and cultural diversity: Computers, cooperation, and communication for classroom socioacademic achievement*. Albany: State University of New York Press.

Faltis, C., & DeVillar, R. (1990). Computer uses for teaching Spanish to bilingual native speakers. In C. Faltis & R. DeVillar (Eds.), *Language minority students and computers* (pp. 257-269). New York: Haworth.

Figueroa, E. (1988). *Efectos del adiestramiento en redacción computadorizada en las actitudes del personal de Tecnología Educativa hacia la enseñanza de la redacción*. (The effects of staff development on attitudes toward the teaching of writing among the Educational Technology Office Staff of the Department of Public Transportation of Puerto Rico). Unpublished manuscript, University of Puerto Rico, Río Piedras.

Figueroa, E., Sayers, D., & Brown, K. (1990). Red multilingüe para el aprendizaje: De Orilla a Orilla. [A multilingual learning network: From Shore to Shore]. *Micro-Aula: El Maestro y la Computadora, 8*, 27-30.

Green, C. (1990). *An implementation of Project "De Orilla a Orilla": A cultural exchange program in a fourth-grade English immersion class in Mayagüez, Puerto Rico*. Unpublished master's thesis, University of Puerto Rico, Mayagüez.

Lee, W.B. (1980). Ecole Moderne Pedagogie Freinet: Educational bonesetters. *Phi Delta Kappan, 61*(5), 341-45.

Lee, W.B. (1983). Célestin Freinet, the unknown reformer. *Educational Forum, 48*(1), 97-114.

Roberts, L., & staff. (1987). *Trends and status of computers in schools: Use in Chapter 1 programs and use with limited English proficient students*. Washington, DC: U.S. Congress Office of Technology Assessment.

Sayers, D. (1988a). *Editorial boards between sister classes*. Unpublished manuscript. Harvard Graduate School of Education, Cambridge, MA.

Sayers, D. (1988b). *Interscholastic correspondence exchanges in Célestin Freinet's Modern School Movement: Implications for computer-mediated student writing networks*. Unpublished manuscript. Harvard Graduate School of Education, Cambridge, MA.

Sayers, D. (1989). Bilingual sister classes in computer writing networks. In D. Johnson & D. Roen (Eds.), *Richness in writing: Empowering ESL writers* (pp. 120-133). New York: Longman.

Sayers, D. (1991). Cross-cultural exchanges between students from the same culture: A portrait of an emerging relationship mediated by technology. *The Canadian Modern Language Review/La Revue Canadienne des langues vivantes, 47*, 678-696.

Sayers, D. (in press). Bilingual teacher partnerships over long distances: A technology-mediated context for intra-group language attitude change. In C. Faltis & R. DeVillar (Eds.), *Successful cultural diversity: Classroom practices for the 21st century*. Albany: State University of New York Press.

Sayers, D., & Brown, K. (1987). Bilingual education and telecommunications: A perfect fit. *The Computing Teacher, 17*, 23-24.

Willetts, K. (1989). Computer networking applications. *Athelstan Newsletter on Technology and Language, 2*(2), 1-3, 10.

CHAPTER 9

Discourse and Social Practice: Learning Science in Language Minority Classrooms

Beth Warren, Ann S. Rosebery, and Faith Conant
Technical Education Research Center (TERC)
Cambridge, Massachusetts

This chapter is broadly about literacy or, more properly, literacies. Taking as our starting point the discussions of biliteracy in many of the chapters in this volume, we hope to contribute to the elaboration of the meaning of biliteracy by exploring the pluralistic and socially embedded nature of literacy. In these chapters biliteracy has been explored from linguistic, cognitive, pedagogical, political, and sociocultural perspectives. We will extend the focus on language—first and second languages—expressed in these chapters to a focus on discourse as the unit of analysis needed to understand the complexity of the task facing bilingual students.

Knowing a language, any language, means knowing more than the English language, or the Spanish language, or any other language for that matter. Each language is really many languages, a set of possible discourses people use to communicate with one another in their daily activity (Bakhtin, 1981). Each of these discourses in turn constitutes a set of beliefs and values in terms of which one speaks, thinks, and acts (Gee, 1989). The particular discourse worlds we inhabit will depend on our history, the books we have read, the people with whom we have talked and from whom we have learned, the social circles in which we have moved, our economic class, our generation, our epoch, the institutions (church, political party, schools, societies) to which we have belonged, and so forth (Booth, 1986). As the Soviet theorist Mikhail Bakhtin (1981) explains:

> At any given moment of its historical existence, language . . . is heteroglot from top to bottom: it represents the co-existence of socio-ideological contradictions between the present and the

> past, between differing epochs of the past, between different socio-ideological groups in the present, between tendencies, schools, circles and so forth, all given a bodily form. These "languages" of heteroglossia intersect each other in a variety of ways, forming new socially typifying "languages." (p. 291)

The idea that language is heteroglot poses some difficulties for both our common sense and technical uses of the term "literacy." In both senses, the term is often used to suggest a capability that is unitary and univocal rather than pluralistic and multivocal (although the varied definitions of literacy that abound in the literature are perhaps a clue to its inherent diversity). In the same vein, literacy often is defined in terms of mastery of certain general skills—reading, writing, arithmetic skills—rather than in terms of mastery of whole systems of meaning and practices, each involving a set of beliefs and values or, in Bakhtin's term, an ideology.

From this perspective, the task facing the second language learner—specifically, in this culture, the learner of English—is enormously complex. Learning English in school really means appropriating whole systems of meaning involved in such school tasks as reading and answering questions about stories, talking to the teacher, taking tests, playing with other students in the schoolyard, doing mathematics, doing science, doing history, and so on. But in many, if not most, schools this pluralistic perspective is not enacted; English—that is, grammar and vocabulary—is the real subject of instruction, whether in ESL, science, or social studies. It is presented as a ready-made and neutral system that the learner is meant to assimilate through practice and memorization.

In our work, we are trying to understand how language minority students begin to appropriate a new discourse, specifically *scientific discourse* (Rosebery, Warren, & Conant, 1990; Rosebery, Warren, & Conant, 1992; Warren, Rosebery, & Conant, 1989). In collaboration with bilingual teachers, we are working to create communities of authentic scientific practice in language minority classrooms; that is, communities in which students do science in ways that practicing scientists do. In this context, science is organized as a socially embedded activity in which students pose their own questions, plan and implement research to explore their questions, collect, analyze, and interpret data, build and argue theories, draw conclusions and, in some cases, take actions based on their research. We stress the

notion of appropriation because we see the learner as essentially finding ways to take the sense-making practices of science and make them his or her own, tuning them to his or her own intention, his or her own sense-making purposes.

The complexity of the appropriation process cannot be overstated, as Bakhtin (1981) explains:

> [The word in language] becomes "one's own" only when the speaker populates it with his own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention. Prior to this moment of appropriation, the word . . . exists in other people's mouths, in other people's contexts, serving other people's intentions: it is from there that one must take the word, and make it one's own. And not all words for just anyone submit equally easily to this appropriation, to this seizure and transformation into private property: many words stubbornly resist, others remain alien, sound foreign in the mouth of the one who appropriated them and who now speaks them; they cannot be assimilated into his context and fall out of it; it is as if they put themselves in quotation marks against the will of the speaker. Language is not a neutral medium that passes freely and easily into the private property of the speaker's intentions; it is populated—overpopulated—with the intentions of others. Expropriating it, forcing it to submit to one's own intentions and accents, is a difficult and complicated process. (pp. 293-294)

For language minority students, the appropriation process can be even more arduous than for other students, for the distance they must travel between discourse worlds is often far greater. They keenly feel the conflict between American viewpoints, values, and beliefs and those of their own culture; perhaps the most well researched example of this is the emphasis in American schools on individual as opposed to collective action (Au, 1980; Au & Jordan, 1981; Mohatt & Erickson, 1980; Philips, 1972).

What makes appropriation so difficult is that discourses are inherently ideological; they crucially involve a set of values and viewpoints in terms of which one speaks, acts, and thinks (Bakhtin, 1981; Gee, 1989). As a result, discourses are always in conflict with one another in their underlying assumptions and values, their ways of making sense, their viewpoints, and the objects and concepts

with which they are concerned. Each gives a different shape to experience. Therefore, appropriating any one discourse will be more or less difficult depending on the various other discourses in which students (and their teachers) participate.

From this perspective, then, we do not define scientific literacy as the acquisition of specific knowledge (facts) or skills, nor even from a cognitive perspective as the refinement of a mental model. Rather we understand scientific literacy to be a socially and culturally produced way of thinking and knowing, with its own sense-making practices, its own values, norms, beliefs, and so forth. In this light, when students participate in a community of scientific practice, they begin to appropriate not scientific facts but socially mediated ways of knowing, thinking, and using language (both first and second languages) to construct scientific meanings. Our belief is that this discourse perspective is necessary if we are to understand how schools can better meet the challenge of educating bilingual students.

In this chapter we will explore the efforts of some high school students to make sense of data they collected about the quality of their community's drinking water. The focus of our analysis will be on the relationship between voice and social practice—in particular, how the students struggled to appropriate a scientific voice as they constructed scientific meanings. As part of this analysis, we will contrast the uses of language that emerged in the context of authentic scientific practice on the one hand and conventional school practice on the other. In the conclusion, we will explore more broadly the educational implications of the analysis for language minority students.

Background

Before launching into the details of the case, some background on what we mean by "communities of authentic scientific practice" is needed. First, we ground our work in the research literature. Secondly, we outline a perspective on scientific practice that draws on several sources, including the reflections of practicing scientists and ethnographic studies of laboratory life. Finally, we offer a general approach to building communities of scientific practice in the bilingual classroom.

A new conceptualization of learning is emerging in the research literature (Brown, Collins, & Duguid, 1989; Lampert, 1990; Lave, 1988, 1991; Resnick, 1989; Schoenfeld, 1992; in press). Drawing heavily on Vygotsky (1978, 1985) and on anthropological perspectives on learning and cognition (Geertz, 1973, 1983; Lave, 1988), this literature views learning as an inherently cognitive *and* social activity. The child appropriates new forms of discourse, knowledge, and reasoning through his or her participation in socially defined systems of activity. As Resnick (1989) has recently argued, education may be better thought of as a process of socialization, rather than instruction, into ways of thinking, knowing, valuing, and acting that are characteristic of a particular discipline.

Central to this view is the idea that concepts are constructed and understood in the context of a community or culture of practice; their meaning is socially constituted (Brown et al., 1989). Within this community, moreover, practitioners are bound by complex, socially constructed webs of belief that help to define and give meaning to what they do (Geertz, 1983). As Mehan (1992) has noted, members of a community "cannot make up meanings in any old way" (p. 77). Rather, they build up ways of knowing, talking, acting, and valuing, which help to constrain the construction of meaning within the discipline. Within this framework, the learner is conceptualized as one who appropriates new forms of knowledge through apprenticeship in a community of practice (Brown et al., 1989; Collins, Brown, & Newman, 1989; Lampert, 1990; Lave, 1988, 1991; Resnick, 1989; Rosebery et al., 1990, 1992; Schoenfeld, 1992, in press; Warren et al., 1989).

What, then, is the nature of scientific practice? For the Nobel laureate scientist, Sir Peter Medawar (1987), scientific sense-making is a kind of storytelling:

> Like other exploratory processes, [the scientific method] can be resolved into a dialogue between fact and fancy, the actual and the possible; between what could be true and what is in fact the case. The purpose of scientific enquiry is not to compile an inventory of factual information, nor to build up a totalitarian world picture of Natural Laws in which every event that is not compulsory is forbidden. We should think of it rather as a logically articulated structure of justifiable beliefs about a

> Possible World—a story which we invent and criticize and modify as we go along, so that it ends by being, as nearly as we can make it, a story about real life. (p. 129)

Medawar's use of the story metaphor represents a bold challenge both to typical school beliefs about what it means to be scientifically literate and to the larger culture's assumptions about the nature of scientific knowledge. First, he challenges the belief that science, at bottom, is the discovery of a reality that exists "out there," pregiven but hitherto concealed (Latour & Woolgar, 1986). Secondly, he challenges the belief that scientists work according to a rigorously defined, logical method, known popularly as "the scientific method." And thirdly, through his emphasis on story building, he challenges the belief that scientific discourse, the construction of scientific meaning, is represented uniquely by forms of writing and speech that are thoroughly objective and impersonal.

Central to Medawar's vision is an idea of scientific practice in which creativity and construction, rather than discovery, predominate. His language suggests that science is projective rather than objective: Scientists build stories about a possible world; they do not discover the truth that already exists out there. Further, he insists on the dialogic quality of scientific activity: fact and fancy, invention and criticism interacting.

Contemporary sociological and anthropological studies of the nature of scientific activity in laboratory settings add an explicit social dimension to this picture (Knorr-Cetina & Mulkay, 1983; Latour, 1987; Latour & Woolgar, 1986; Longino, 1990; Lynch, 1985). These studies show that scientists construct and refine their ideas within a community in which they transform their observations into findings through argumentation and persuasion, not simply through measurement and discovery. The apparent logic of scientific papers is really the end result of the practice of a group of scientists whose goal is to eliminate as many alternative interpretations as possible in their account of the phenomena being studied. (It is hard not to hear an echo of Medawar's storytelling in this.) Through the "superimposition of inscriptions" (Latour & Woolgar, 1986) (graphs, notes, statements, drafts of papers, published papers), accounts are constructed, claims are negotiated, analogies are sought, arguments are put forward and defended against attack, and objections are anticipated. As Latour and Woolgar (1986) show, the scientists they stud-

ied claimed merely to be discovering facts, but close observation revealed that they were writers and readers in the business of being convinced and convincing others. Throughout this process, the "facticity" of statements is in constant flux as statements are evaluated and reevaluated. Rather than the orderly, logical, and coherent process that is described in science textbooks as the scientific method, actual scientific practice entails making sense out of frequently disorderly observations, and negotiating among alternative interpretations. However, once a statement or account has stabilized, all traces of its production are eliminated and, as in journal articles, it appears that reality is the cause rather than the consequence of its construction.

Through our work with bilingual teachers and students, we are attempting to elaborate an approach to science teaching and learning that supports the development of classroom communities of authentic scientific practice. This approach entails a radically different orientation to teaching and learning than that found in traditional classrooms—one in which students construct their scientific understanding through an iterative process of theory building, criticism and refinement organized around their own questions, and hypotheses and data analysis activities. Fundamentally, the idea is to place question posing, theorizing, and argumentation at the heart of students' scientific activity. Students explore the implications of the theories they hold (sometimes called "naive" theories), examine underlying assumptions, formulate and test hypotheses, develop evidence, negotiate conflicts in belief and evidence, argue alternative interpretations, provide warrants for conclusions, and the like. Conceptually, they investigate their own questions and the beliefs or theories from which they derive; epistemologically, they explore relationships among truth, evidence, and belief in science. They, in short, become authors of ideas and arguments (cf. Lampert, 1990; Warren et al., 1989). In practice, the approach is one of collaborative inquiry. The heart of the approach is for students to formulate questions about phenomena for which they have some prior belief (e.g., Is our school's water safe to drink? Is the air temperature hottest at noon? Is salt consumption related to physical fitness?). They then build and criticize theories, collect and analyze data, evaluate hypotheses through experimentation, observation, and measurement, and interpret and communicate their findings.

More than simply involving students in hands-on science, the classrooms evolve into communities in which scientific sense-making is actively practiced. Toward this end, investigations are also collaborative, just as most authentic scientific activity is. The emphasis on collaborative inquiry reflects our belief, building on Vygotsky (1978), that robust knowledge and understandings are socially constructed through talk, activity, and interaction around meaningful problems and tools. Collaborative inquiry provides direct cognitive and social support for the efforts of a group's individual members. Students share the responsibility for thinking and doing, distributing their intellectual activity so that the burden of managing the whole process does not fall to any one individual. The distribution and sharing of intellectual responsibility is particularly effective for language minority students, for whom the language demands of tasks are often overwhelming and can often mask their abilities and understanding. In addition, collaborative inquiry creates powerful contexts for constructing scientific meanings. In challenging one another's thoughts and beliefs, students must be explicit about their meanings; they must negotiate conflicts in belief or evidence; and they must share and synthesize their knowledge in order to achieve a common goal, if not a common understanding (Barnes & Todd, 1977; Brown & Palincsar, 1989; Hatano, 1981; Inagaki & Hatano, 1983).

Finally, investigations are interdisciplinary; science, mathematics, and language (speaking, reading, and writing) are intimately linked. Mathematics and language are recognized as essential tools of scientific inquiry, a recgonition that stands in sharp contrast to traditional schooling in which science is separated from math, and the role of language in each is hardly acknowledged. The importance of an interdisciplinary approach cannot be overstated with regard to language minority students. It involves them directly in the kinds of purposeful, communicative interactions that promote genuine language use—interactions that arguably are the most productive contexts for language acquisition—such as talking in the context of doing science and trying to solve a meaningful problem. It also creates opportunities for students to use the languages of science and mathematics in ways that schools and the society at large require: not just to read textbooks or do computations, but to write reports, argue a theory, develop evidence, and defend conclusions.

Bacteria Study

To illustrate the approach, we offer an example taken from a bilingual basic skills class in a large urban high school. There were 22 students in the class representing six different language groups: Haitian Creole, Spanish, Portuguese, Amharic, Tigrinya, and Cape Verdean Creole. The students were for the most part recent immigrants who knew little or no English. Many could not read or write in their first languages. Most had acquired only basic mathematical skills (e.g., addition and subtraction) and had no previous experience with science.

During the spring the class studied a local pond bordering the city's water reservoir. On an earlier trip to the pond, the students had been struck by its poor condition as well as its proximity to the city's drinking water supply. An empty oil barrel and a shopping cart sat in the shallows; bottles and broken glass littered the shore; and the water was murky and slick with oil. The students wondered how the pond came to be a dumping ground and if it posed any hazard to the city's water supply.

In the context of their field study, the students analyzed some of the pond's chemical, biological, and physical characteristics. They also investigated the city's water supply, learning about its sources, how it is purified, and how it is piped throughout the city. Groups of students took responsibility for different aspects of the study.

As part of their spring investigation, the students compared the bacteria level of the pond to the bacteria level of their community's tap water. They were interested in two things: How much bacteria was in the pond? How much bacteria was in their drinking water? They collected water samples from the pond and brought them back to the classroom. They also brought in samples of their home tap water and sampled several drinking fountains in the school.

To determine the bacteria levels in these different water sources, they performed a test for fecal coliform using commercially available culture kits called Millipore samplers. A Millipore sampler consists of an absorbent, nutrient-filled pad that fits into a plastic holder. The pad is marked with a grid. To test for bacteria, the pad is immersed in a water sample, placed inside the plastic holder, and incubated for twenty-four hours. At the end of twenty-four hours, the grid on the pad is inspected for bacteria colonies, which appear as tiny black, blue, or green spots. A pamphlet accompanying the samplers

allows the user to assign a water quality grade based on the number of colonies that grow. To be drinkable, water must have a count of zero.

The students grew cultures from pond water, home tap water, and school water. However, many of the cultures did not take, possibly because of inadequate incubation. (The precise reasons were never determined.) A few survived, however, and one Haitian student, Rose, used them as the basis for investigating the bacteria level in the city's tap water.

Rose's first step was to document the results from a successful home tap water culture. In her lab notebook, she drew a facsimile of the Millipore sampler and reproduced the position and size of each of the 57 bacteria colonies that had grown (see Figure 1). This entailed meticulous attention to detail. The original grid measured only 1.75" X 3", and the colonies were best seen under magnification. Working carefully from the sampler, Rose produced an accurate rendering of the culture.

Figure 1.
Rose's Reproduction of the Bacteria Sampler and Interpretation of the Data

I counted the bacteria on the tap water & found barely 20 bacteria in the pond water. That's mine you cannot not counting but you can swim on that water Grade B for that water because whole body contact no more than 200/100 ml

Rose's findings corroborated an estimate of the presence of 60 colonies given earlier by another student who had examined the sampler with a hand lens. While she was pleased that her results were confirmed by the earlier estimate, her contentment was quickly

overshadowed by her realization of their significance. According to the standards stated in the Millipore pamphlet, the tap water, which had come from a student's home, was not fit to drink. She proceeded to document her finding in English, as shown in the figure.

Rose's report, brief as it is, utilizes different kinds of information and draws on diverse resources and voices to communicate her finding and its significance. In it, she puts the reader in contact, even if only implicitly, with other texts such as the written standards that accompany the Millipore samplers. She documents her narrative with representations (both graphical and numerical) of the culture, thereby adding to the credibility of her report and interpretation. She describes how she came to her results, emphatically marking them as the product of her own activity through use of the first person authorial voice ("I counted," "I find"). Through this use of voice, Rose marks the finding as a personal construction; it does not exist apart from her agency.

It is interesting that, when interpreting the data according to the standards, Rose switches from the first person to the more authoritative, objective voice signalled in, "That's mine (That means) you can't not drinking but you can swim on that water. Grade B for that water because whole body contact no more than 200/100 ml." Here she is appropriating the words of the Millipore pamphlet to interpret her finding and to inform others of its significance: The water used in this sample is fit for whole body contact but not for drinking. (Grade B water, which is suitable for whole body contact such as swimming, can contain a bacterial count of 1–200 colonies per 100 ml of water.) The switch in voice suggests Rose's awareness of the need for credibility; reference to the water quality standards stated in the pamphlet lend her argument a validity it would not otherwise have.

From our perspective, what stands out in this episode is the way in which Rose has taken control of the bacteria study, shaped it to her own purposes and taken a point of view, and then interpreted her activity and its significance for a larger community. The mixed levels of description and explanation, the orchestration of multiple voices, the recourse to standards and multiple representations reflect her own efforts at sense-making and belie the surface simplicity of her report. These sense-making efforts reflect her struggle to appropriate scientific ways of thinking, knowing, and writing; in short, to forge a scientific voice. She is working through for herself

the relationship between the processes by which she produced her finding and the means for communicating that finding. This effort is a key aspect of scientific practice, one that is well known to anyone who has struggled to craft a "story" about one's data. That Rose does this in English, by her own choice, only adds to the complexity of her task.

Around the time of the bacteria study, the class as a whole was preparing for a field trip to the city's reservoir and water treatment facility. The students were told that at the end of the trip they would have a chance to ask questions of the city's water chemist. In preparation for the trip, many of the students read a booklet, *The Story of Water*, prepared by the city's water department. It explained in pictures and words the water cycle and water treatment process. The teacher guided the students in developing the following kinds of questions that the students then copied into their notebooks:

> What machines are used to purify water?
>
> What is chlorination?
>
> What is filtration?

These questions are typical of those often asked of students in school. To hark back to the introduction, "it is as if they [the words] put themselves in quotation marks against the will of the speaker" (Bakhtin, 1981). The question arises: Whose questions are they? Why are they being asked? Clearly, they are not questions for which the answer is unknown or genuinely sought. Rather they seek to test comprehension of information readily available in some external authority such as a text or dictionary, or in this case, the water department's booklet. The focus is on defining technical terms, not on constructing knowledge or solving a problem. The lack of student agency and purpose is perhaps most clearly reflected in the impersonal, objective voice in which the questions are cast. There is no sense of ownership, of the students as agents in their own learning.

In contrast, Rose and another student, Marie, used the bacteria results as the basis for developing questions designed to pursue the full implications of those findings. Not surprisingly, their questions differed markedly from those of their classmates, in both substance and tone (we have not corrected the students' writing):

I went a know how come bacteria come in the water?

How come they clearn the water but it still has bacteria in it?

I went to know how often they clean the water?

Through these questions, Rose and Marie are assuming an active, critical stance toward language use. In a very real sense, their discourse is an action, asserting a will to know ("I went to know"). It is also productive, literally putting into question the dilemma posed by Rose's findings ("How come they clearn the water but it still has bacteria in it?") and seeking to resolve it. Unlike the class's questions, these questions are openly evaluative, expressing a particular point of view. Moreover, to construct them, Rose and Marie had to engage the problem of communication directly, determining their attitude toward the bacteria findings, judging their audience and, based on these, determining their modes of expression. Their struggle is reflected directly in their choice of pronouns. Rose and Marie actively take on the role of interrogator through use of the first person ("I went to know"). However, they do not then directly address the water chemist; rather they use the adversarial, impersonal third person plural "they" ("I went a know how often they clean the water"). The struggle evidenced here is somewhat ambiguous. It is possible that they are not entirely sure who their audience is—the water officials, the teacher, or both—and so they find themselves caught between two discourse worlds, that of the school and that of their own scientific practice. Alternatively, it is possible that the water chemist represents for them an anonymous authority since they have not yet met him. The ambiguity, however, hints at an important point. Rose and Marie's words are not entering into a vacuum, but a "tension-filled environment" (Bakhtin, 1981, p. 276) potentially charged with different points of view and conflicting values: theirs and those of the water officials. Through their questions, Rose and Marie are active participants in social dialogue.

It is precisely this kind of struggle, involving various kinds and levels of evaluation, that constitutes authentic language use and determines the expressive aspect of speech (Holquist, 1990). It is typically absent from most work in schools where language is treated as objective and neutral, as a set of authoritative forms to be learned and assimilated, and not as a socially constructive process that takes place between speakers. Rose and Marie's questions are not merely

assertive in form, they are real assertions in a chain of activity and communication designed to produce real answers. It is also interesting how form can belie content. Notice that although the class's questions look factual (i.e., seeking authoritative definitions for technical terms), they are not factual in the scientific sense (based on scientific evidence). In contrast, although Rose and Marie's questions sound personal, they are grounded scientifically.

Through their scientific activity, Rose and Marie began to appropriate language to their own intention in order to resolve the dilemma raised by their inquiry and reflected in the question: "How come they clearn the water but it still has bacteria in it?" Marie's attitude toward this contradiction was a mixture of indignation and excitement. She marvelled in class that her town's water, which was supposed to be clean, could have bacteria in it. On the field trip, she looked forward to the opportunity to confront the authorities at the water treatment plant with her evidence that things were not as they should be. In short, she felt empowered by her knowledge. Unfortunately, the eagerly anticipated question-and-answer period never materialized because the plant tour went on longer than expected. So bitter was Marie's disappointment that in an interview conducted two months later, she referred to the water treatment plant as "*kote nou te—tap pose moun yo kesyon epi nou pat pose moun yo kesyon anko*," effectively, "the place we were going to ask the people questions and we didn't get to."

Ironically, Marie's frustration reveals the power of her experience. Like Rose, she had appropriated the results of the bacteria study, their meaning being most forcefully expressed in the questions the two girls prepared for the field trip. Marie's ownership, like Rose's, resulted from having thought seriously about the implications of the data for the quality of drinking water in her town and having prepared to confront the authorities about them. That Marie was still thinking about her missed opportunity at the end of the year, weeks after the investigation, suggests that she internalized what she had learned about water quality and experimental analysis on the one hand, and the inherent conflict between scientific practice and school practice on the other.

Conclusion

In this chapter we have explored the multivocal nature of literacy both in theory and in practice. In the bacteria investigation, we saw how the students began to appropriate the intentional possibilities of language in order to construct scientific meanings and resolve the dilemma posed by the evidence they had developed. We saw also how Rose's and Marie's struggle to orient themselves in a heteroglot environment contrasted markedly with the rest of the class's work, in which words were treated as if their meanings resided in dictionaries rather than in concrete sociohistorical contexts. In the former case, the language used is authoritative; it is distanced from the students' own sense-making (Emerson, 1986). In the latter case, the students are actively constructing meaning; in Bakhtin's terms, they are developing "internally persuasive" discourse. As Emerson (1986) suggests, this struggle between authoritative and internally persuasive discourse is a key to intellectual growth.

The perspective on literacy we have outlined helps reframe the problem of learning in multilingual and multicultural contexts. It recognizes the inextricable connection of literacy to social practice, emphasizing first the pluralistic nature of literacy and, secondly, the idea that all literacies or discourses are specific points of view on the world, each characterized by its own objects, meanings and values (Bakhtin, 1981):

> For any individual consciousness living in it, language is not an abstract system of normative forms but rather a concrete heteroglot conception of the world. . . . Each word tastes of the context and contexts in which it has lived its socially charged life; all words and forms are populated by intentions. (p. 293)

In this view, the learner appropriates new ways of knowing through active participation in a community of practice (Brown et al., 1989; Collins et al., 1989; Lave, 1991). These ways of knowing are not reducible to specialized vocabularies or specific forms for expressing explanations. Rather they represent whole systems of meaning permeated with specific values and accents.

This perspective on literacy, as we have tried to suggest, carries important implications for learning. It suggests a view of learning that differs in fundamental ways from traditional schooling in which lecture and textbooks are the foundation, and the preferred social unit is the individual. In bilingual contexts, this model is often more

extreme when applied to subjects like science and ESL; the result is an emphasis on assimilating decontextualized vocabulary, grammar, and facts. In a community of practice, in contrast, the ways in which students do science or any other subject closely parallel those of actual practitioners. In the process, students construct their knowledge by confronting authentic dilemmas, arguing alternative interpretations, posing questions, establishing standards of evidence, and exploring modes of argumentation. We think that the example of Rose and Marie illustrates this approach to learning, one that is richer, more effective, and ultimately more empowering.

In this chapter we have tried to present a view of literacy and learning that, together with the other chapters in this book, reframes what it means to learn and to use language. Further, it directly calls into question some of the educational practices that predominate in bilingual and ESL classrooms. Rather than seeing language as a static, unitary, and abstract system, it sees language as dynamic, multivocal, and socially and historically situated. This perspective helps us to understand diversity as a fundamental aspect of human culture, a strength to be cultivated rather than a problem to be solved.

> At any given moment of its evolution, language is stratified not only into linguistic dialects in the strict sense of the word (according to formal linguistic markers, especially phonetic), but also—and for us this is the essential point—into languages that are socio-ideological: languages of social groups, "professional" and "generic" languages, languages of generations and so forth. And this stratification and heteroglossia, once realized, is not only a static invariant of linguistic life, but also what insures its dynamics: stratification and heteroglossia widen and deepen as long as language is alive and developing. (Bakhtin, 1981, pp. 271-272)

Notes

We should note that the classroom described in this chapter functioned as a bilingual community. Both first (Haitian Creole, Spanish, Cape Verdean Creole, Portuguese, Amharic, and Tigrinya) and second languages were used by the students. Language choice was usually determined by purpose. English was used predominantly when the students were communicating with an English-speaking audience (e.g., water department officials) or, as in Rose's case, when they were writing for publication. The students used their first language most of the time to "talk science" in the classroom. Sometimes, the students translated their writing from their first language to English.

The work reported in this chapter was supported under the Innovative Approaches Research Project, Contract No. 300-87-0131, from the U.S. Department of Education, Office of Bilingual Education and Minority Languages Affairs (OBEMLA). Preparation of the chapter was also supported by the National Center for Research on Cultural Diversity and Second Language Learning, under the Educational Research and Development Center Program (Cooperative Agreement No. R118G10022), administered by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. The views expressed here do not necessarily reflect the positions or policies of OBEMLA or OERI.

We gratefully acknowledge the work of the teachers and students who participated in this research.

References

Au, K. (1980). Participation structures in a reading lesson with Hawaiian children: Analysis of a culturally appropriate instructional event. *Anthropology and Education Quarterly, 11*(2), 91-115.

Au, K., & Jordan, C. (1981). Teaching reading to Hawaiian children: Finding a culturally appropriate solution. In H.T. Trueba, G.P. Guthrie, & K. Au (Eds.), *Culture and the bilingual classroom: Studies in classroom ethnography* (pp. 139-152). Rowley, MA: Newbury House.

Bakhtin, M. (1981). *The dialogic imagination*. Austin: University of Texas.

Barnes, D., & Todd, F. (1977). Talk in small learning groups: Analysis of strategies. In C. Adelman (Ed.), *Uttering, muttering: Collecting, using and reporting talk for social and educational research* (pp. 69-77). London: Grant McIntyre.

Booth, W.C. (1986). Freedom of interpretation: Bakhtin and the challenge of feminist criticism. In G. Morson (Ed.), *Bakhtin: Essays and dialogues on his work* (pp. 145-176). Chicago: University of Chicago Press.

Brown, A., & Palincsar, A.M. (1989). Guided, cooperative learning and individual knowledge acquisition. In L.B. Resnick (Ed.), *Cognition and instruction: Issues and agendas* (pp. 393-451). Hillsdale, NJ: Erlbaum.

Brown, J.S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32-42.

Collins, A., Brown, J.S., & Newman, S.E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L.B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Erlbaum.

Emerson, C. (1986). The outer word and inner speech: Bakhtin, Vygotsky, and the internalization of language. In G. Morson (Ed.), *Bakhtin: Essays and dialogues on his work* (pp. 21-40). Chicago: The University of Chicago Press.

Gee, J.P. (1989). *What is literacy?* (Tech. Rep. No. 2). Cambridge, MA: Education Development Center, The Literacies Institute.

Geertz, C. (1973). *The interpretation of culture*. New York: Basic Books.

Geertz, C. (1983). *Local knowledge*. New York: Basic Books.

Hatano, G. (1981). Cognitive consequences of practice in culture specific procedural skills. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition, 4*, 15-18.

Holquist, M. (1990). *Dialogism: Bakhtin and his world*. New York: Routledge.

Inagaki, K., & Hatano, G. (1983). Collective scientific discovery by young children. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, 5(1), 13-18.

Knorr-Cetina, K.D., & Mulkay, M. (Eds.). (1983). *Science observed: Perspectives on the social study of science*. London: Sage.

Lampert, M. (1990). When the problem is not the question and the solution is not the answer: Mathematical knowing and teaching. *American Education Research Journal, 27*(2), 29-63.

Latour, B. (1987). *Science in action*. Cambridge: Harvard University Press.

Latour, B., & Woolgar, S. (1986). *Laboratory life: The social construction of scientific facts*. Princeton: Princeton University Press.

Lave, J. (1988). *Cognition in practice*. New York: Cambridge University Press.

Lave, J. (1991). Situating learning in communities of practice. In L. Resnick, J. Levine, & S. Teasler (Eds.). *Perspectives on socially shared cognition*. Washington, DC: American Psychological Association.

Longino, H. (1990). *Science as social knowledge*. Princeton: Princeton University Press.

Lynch, M. (1985). *Art and artifact in laboratory science: A study of shop work and shop talk in a research laboratory*. London: Routledge and Kegan Paul.

Medawar, P. (1987). *Pluto's republic*. Oxford: Oxford University Press.

Mehan, H. (1992). The school's work of sorting out students. In D. Boden & D.H. Zimmerman (Eds.), *Talk and social structure* (pp. 75-100). London: Polity.

Mohatt, G., & Erickson, F. (1980). Cultural differences in teaching styles in an Odawa school: A sociolinguistic approach. In H.T. Trueba, G.P. Guthrie, & K. Au (Eds.), *Culture and the bilingual classroom: Studies in classroom ethnography* (pp. 105-119). Rowley, MA: Newbury House.

Philips, S. (1972). Participant structures and communicative competences: Warm Springs children in community and classroom. In C. Cazden, D. Hymes, & V. John (Eds.), *Functions of language in the classroom* (pp. 370-394). New York: Teachers College Press.

Resnick, L. (1989). Treating mathematics as an ill-structured discipline. In R. Charles & E. Silver (Eds.), *The teaching and assessing of mathematical problem-solving* (pp. 32-60). Reston, VA: National Council of Teachers of Mathematics.

Rosebery, A., Warren, B., & Conant, F. (1990). *Making sense of science in language minority classrooms* (Tech. Rep. No. 7306). Cambridge, MA: Bolt, Beranek, & Newman.

Rosebery, A., Warren, B., & Conant, F. (1992). Appropriating scientific discourse: Findings from language minority classrooms. *Journal of the Learning Sciences, 2*(1), 1-94.

Schoenfeld, A. (1992). Learning to think mathematically: Problem solving, metacognition, and sense-making in mathematics. In D. Grouws (Ed.), *Handbook for research on mathematics teaching and learning*. New York: MacMillan.

Schoenfeld, A. (in press). Reflections on doing and teaching mathematics. In A. Schoenfeld (Ed.), *Mathematical thinking and problem solving*. Hillsdale, NJ: Erlbaum.

Vygotsky, L.S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1985). *Thought and language*. Cambridge, MA: MIT Press.

Warren, B., Rosebery, A., & Conant, F. (1989). *Cheche Konnen: Science and literacy in language minority classrooms* (Tech. Rep. No. 7305). Cambridge, MA: Bolt, Beranek & Newman.

CHAPTER 10

Engaging Students in Learning: Literacy, Language, and Knowledge Production with Latino Adolescents

Catherine E. Walsh
University of Massachusetts, Boston

I want to begin by posing a series of questions that generally underlie the book's theme of biliteracy in the United States and specifically frame the substance of my chapter. The questions are not necessarily new; they are ones that theoreticians and practitioners from a variety of ideological leanings have probably asked before. My intent in raising them here is not to afford nor even to suggest definitive answers. Rather, it is to illuminate—through the discourse I use in posing and discussing them—the tentative, speculative, complex, and shifting nature of work in and about literacy for language minority populations. Reflected in the questions is my own ongoing struggle to understand, and to understand how I understand, literacy theory and practice and the bilingual students, communities, and contexts that I study, speak, and write about, work with, and learn from. These are the questions:

- What is literacy?
- What is knowledge?
- What is the relation between literacy and knowledge?
- What does this relation suggest for classroom practice?
- What are the conditions that limit, restrict, or enable access to literacy and knowledge?
- Are these conditions the same for all populations?
- Who are the students and communities that are the "subjects" of our work?
- In what ways do society, schools, and programs define and thus position them?

- Are the understandings of society, schools, and programs similar or different?
- How do the students and their communities perceive and describe their own realities, conditions, and subjectivities?
- How do we interpret these individuals' educational, linguistic, and literacy needs and experiences?
- What are the individuals' own interpretations?

While numerous issues, concerns, perspectives, and experiences are probably brought to mind in pondering these queries, the context for my own analysis and discussion is partially revealed by the spoken words of a 19-year-old Latino high school student from the Boston area who told me about his experience with literacy, the English language, and formal education.

> *The school, yeah, I guess that's where you could say they taught me to read. But it's on the street that I really learned English . . . . The problem is the reading and writing, it don't do me no good 'cause I say and write words but when I try and read the book in them classes I don't understand nothin'. Sometimes I think they do it to hold us back . . . . You know, to make sure los hispanos don't make it . . . .*

This student's brief statement reveals a lot about (bi)literacy, knowledge, and school instruction, about issues of access and control, and about students' awareness of and ability to speak about their lived realities and the ways schools have failed them. Although this student graduated from high school several months after he talked to me, many of his peers were retained for the second, third, or even fourth time. Some were referred for special education while others kept on in the bilingual program with the same classes and the same teachers as the year before. The dropout rate for Latinos in the community at the time was around 70%. The reasons for dropping out were not attributable to literacy levels per se. Yet, if one were to assess the literacy abilities of those retained, referred, or who had left school, chances are high that a large percentage lacked the reading, writing, and comprehension required and expected. In fact, assumptions among teachers and administrators were that high school students should already be able to read and write; if they could not, it certainly was not part of a high school teacher's job to teach them.

As in many cities throughout the country, a growing number of adolescents and young adults in this Boston-area community lack the literacy-related abilities to succeed in traditional bilingual or English-only programs. Some come from rural areas of Puerto Rico, the Dominican Republic, or Central America and have had limited access to formal schooling. Others have been in and out of schools for years, subjected to inappropriate or inconsistent instructional approaches, and/or bounced between a number of linguistic, cultural, social, and educational environments. Most probably fit the profile of adult literacy students who are unable to gain or produce meaning through print in English or in their native language. Many are over 16 and have adult responsibilities. However, because they are enrolled in a high school, the majority have until just recently been afforded minimal (if any) access to literacy learning and, as a result, to other academic content instruction. While the desire to read and write, learn English, and study are the stated reasons why many keep coming to school, instructional attitudes, policies, practices, programs, and approaches work both to limit and position this acquisition; students are not given the opportunity to develop the literacy skills required for further learning (in Spanish or in English) and, for the most part, see little relation between what they are taught and real life existence. Moreover, the natural and dynamic bilingualism that frames many of these students' identities and interactions—that is, the communicative varieties and standard and nonstandard forms of Spanish and English as well as Spanish-English codeswitching—is not only ignored but generally forbidden in formal instruction. [Editor's note: For a broader discussion of the language use of Hispanics in the United States, see Ramirez, this volume.] In other words, students are told to speak and to write in one language or the other, emphasis is on the standard dialect (which may vary greatly from the language students speak), and preference is always for English. This discordant reality seems to have a lot to do with the way literacy, knowledge, and schooling are traditionally understood in our society, with dominant and subordinate relations of power, and with the rationality that typically underlies mainstream approaches to instruction.

In this chapter, I explore these issues, from both a theoretical and a practical perspective, as they relate to instructional practice and programmatic design in a Boston-area high school, which for purposes of confidentiality will be referred to as City High. In so doing,

I will discuss the different understandings that the school's administrators, teachers, and students have of what these practices and designs offer, at the same time referring back to the theoretical questions posed earlier. I also examine the process by which I arrive at my own understandings and interpretations of what, as a researcher/practitioner, I am seeing, reading, and hearing.

Finally, the paper analyzes the pedagogical approaches I used to encourage Latino adolescents and young adults with limited school-based literacy skills to talk, to theorize, and to write about the contexts and contents of their lives in and out of school, and about how their education could be more relevant and better directed. The significance of these approaches for (bi)literacy development and knowledge production as well as for self-esteem and academic and social engagement is made clear through examples of the students' dialogues, analyses, and written products. Further made evident is the psychosocial significance of dual language (L1/L2) literacy promotion.

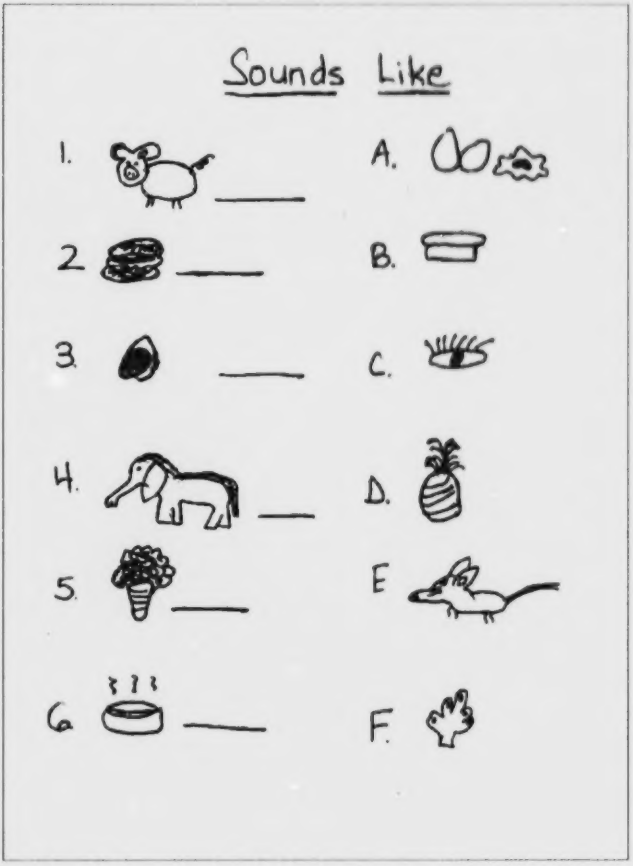
Literacy, Knowledge, and Schooling: Dominant Perspectives

Literacy has long been considered the basis for higher order, analytical thought and the gateway into material success in industrialized capitalist societies. While numerous authors have criticized this notion as mythical in real life (e.g., Graff, 1987; Walsh, 1991b), educational institutions generally continue to maintain and promote the literacy and success relation. Public school students are told that English reading and writing skills and a high school diploma are essential for employment, although little or no opportunity is provided for students (particularly poor students for whom standard English is a second language or dialect) to develop literacy after primary school. In fact, the acquisition and imparting of literacy, at least in the context of Western developed societies, is associated with the early school years; those who do not become literate as children are deemed deficient, backward, problematic, and less intelligent. The comments of a Boston-area school administrator make evident this understanding:

> *Those Hispanic students, the ones that can't even read and write, you know, they don't really know how to think either. Their parents are the same way. Why do you think they're on*

welfare, unemployed, always in trouble? . . . We do what we can, that is, for the majority in this school. Those kids, they don't belong here, in this building anyway.

When literacy instruction is provided for these high school students in need, it generally assumes an elementary substance and orientation. The worksheet below, from a Boston high school ESL literacy teacher's classroom, provides an example.



Some students classified as lacking literacy skills arrive in the United States with limited formal schooling, and a significant proportion of students pass through U.S. primary schools without acquiring the literacy skills supposedly taught to them. In 1988, 56% of Latino 17-year-olds and 47% of African-American 17-year-olds were classified as functionally illiterate compared with 13% of white 17-year-olds (Fueyo, 1988). Latino students are also much more likely than whites to have low academic achievement, be retained in grade, and enter high school overage (Hispanic Policy Development Project, 1988). Educators often label such students "at risk" and blame them for the crisis in education. Yet, as minority groups increasingly make up the majority of students in urban schools, school officials are faced with the fact that the at-risk categorization fits most of the student body. What does this say about the U.S. educational system in general and about equality and access in particular?

Research has demonstrated that instructional approaches, ability groupings, choice of texts, language use, contextual situations, and cultural and experiential inclusions and exclusions, among other things, work differentially to control and position literacy development (e.g., Cummins, 1986; Roth, 1984; Shannon, 1989; Walsh 1991a). But even for those who become literate, promise of economic success is still limited by race, ethnicity, class, and gender. Male dropouts from wealthy neighborhoods for example, are much more likely to find jobs than male graduates from poor neighborhoods (Fine, 1987). And (high school and college) diploma-wielding women of color, when they find jobs, continue to be the lowest paid and most underemployed segment of the workforce. Literacy, in and of itself, presents no monetary assurances nor hope for a different future. This is not to say that literacy is not essential to full societal participation or that literacy does not enhance access to information or the development of critical analysis. Rather, it is to argue that the understandings and discourses of and practices toward literacy in the United States are complexly intertwined with the social dynamics and structural inequities of this society. This relationship is further revealed in the definitional conception that guides most public school and adult literacy instruction. Within educational institutions, literacy is most often thought of as comprising the basic, specific, hierarchical, controlled, and measurable skills associated with reading and writing. It is perceived as a singular

entity—literacy, not literacies—and as a have or have-not condition. To be literate means that one is both educated and educable (Cook-Gumperz, 1986), able to utilize the cognitive higher order skills associated with real (academic) learning. As Ferdman (1990) points out:

> Given broad cultural consensus on the definition of literacy, alternative constructions are either remote or invisible, and so literacy becomes a seemingly self-evident personal attribute that is either present or absent. In such an environment, literacy is experienced as a characteristic inherent in the individual. Once a person acquires the requisite skills, she also acquires the quality of mind known as literacy, together with the right to be labeled a literate person. (p.186)

Recent research has shown literacy to be complex and pluralistic, socially, culturally, and contextually bound, interactive, and process- rather than product-oriented in nature (Cook-Gumperz, 1986; Ferdman, 1990; Scribner, 1984). Yet, public schools continue to operate on the belief that literacy develops from the bottom up in small incremental steps, that it is academic, that it is school- rather than community-based or oriented, that it is monolinguistic (developed in one language at a time), and that it can be assessed through quantifiable measures. From where does this understanding derive? Is it solely pedagogical? Or is it also shaped by ideological concerns that extend beyond classrooms?

As I have pointed out elsewhere (Walsh, 1991b), the understandings of and approaches to literacy in schools appear to be tied, in large part, to "beliefs and assumptions about the nature of knowledge, of people (i.e., teachers and students), and of experience and to the relations of power and of social and cultural control which these beliefs and assumptions both construct and incorporate" (p. 9). The orientation that underlies most traditional educational programs, for instance, overwhelmingly derives from a positivist conception of knowledge, a rationality that situates both knowledge and literacy as separate from learners and from their own and their communities' actions, histories, experiences, and lived social, cultural, and linguistic realities. In this sense, knowledge is considered neutral, universal, verifiable information that must be formally acquired and taught. The acquisition or learning of knowledge is treated as deductive and

deterministic; instruction breaks it down into discrete, decontextualized pieces that are systemically fed to students by transmission-oriented and task-directed instructors. As a result, the teachers and students held captive within this positivist rationality come to be seen as the objects of knowledge, unable to act with or upon it. Further, the acts of teaching and learning come to be stabilized through measurable productivity while teacher and student agency (i.e., their capacity to act in and on their environments), creativity, and difference are discounted. Ignored are the enigmatic processes involved in how one comes to know as well as how one comes to relate knowledge to practical, human purposes.

Although positivist pedagogies limit the possibilities of all students, they are particularly problematic for those whose lived experience and cultural frames of reference fall outside the boundaries of the universal image. In other words, while such instructional approaches tout knowledge as neutral, they tend to verify, legitimize, and reinforce the language and literacy-related experiences, the community "social funds" of knowledge (Moll, 1989), and the cultural capital of the white, English-speaking, middle classes. (And within this grouping, the knowledge and experiences of men are legitimized, verified, and reinforced more than those of women.) It is this prerequisite knowledge that is positioned as the desired, universal "standard" (e.g., Bloom, 1987; Hirsch, 1987).[1] Consequently, class, racial, ethnic, and gender stratifications are exacerbated; access to literacy development and knowledge production is mediated through unequal power relations. This happens even in bilingual programs. Students' native language may be intermittently used but this use is seen by teachers and students as remedial in that it is intended to provide a transition to standard English. Biliteracy is neither a goal nor an accepted medium. Furthermore, curriculum and texts (regardless of the language they are written in) corroborate a homogeneity that denies the realities of urban life for bilingual communities.

The recent interest in whole-language approaches to literacy instruction in elementary schools and problem-posing, Freirean-type approaches at the adult level have helped introduce new understandings of the ways literacy develops and students learn. Moreover, these approaches challenge the effectiveness of methodologies that derive from a positivist orientation. In high schools, however, the mainstream, traditional methods still reign; administrators

and teachers generally remain stalwart in their goals and structure and are the most resistant to change and innovation.

For the past five years, I have been actively involved in trying to promote change at City High School. While I remain an outsider to City High's school district in that I am not their employee, my role as an educational expert appointed in a legal consent decree between the school system and Latino parents affords me some authority within the system. As might be expected, however, this role also engenders tension. A large part of my involvement has been focused on addressing the high dropout rate and suspension of Latino students at City High and in trying to initiate policy changes and pedagogical improvements. One aspect of this work has included a several-year effort to develop a new program within the existing bilingual program—a program that would specifically address the biliteracy needs of students and validate and build upon the experiences and knowledge that the students bring with them. While such a program began on a pilot basis during the 1989-1990 school year (the advanced basic skills classroom referred to earlier) and is being further developed this year (1990-91), administrators in the school, along with some teachers, remain opposed to its presence and to its pedagogical purpose and orientation. Their complaints range from the teacher's untraditional approach, classroom management and organization, and noise level, to the problematic nature of the student population and the negative image that they give to the school. One administrator made clear to me his intention in a conversation during fall 1990:

> *I am fed up with that class and with the teacher . . .. She has the students sitting in a circle instead of rows, that leads to disrespect, a lack of focus, and confusion . . . . The [monolingual Anglo male] teachers on either side come to me all the time about the noise, it seems like all the kids are ever doing is talking . . . . you, know, all at once. There is no teacher control, they are not learning anything . . . . I want her out . . . . The kids are the main ones that cause problems in this school. This program, I don't think it's any good. Maybe you should put it somewhere else. If it were up to me, I'd just get rid of it.*

The guidance counselor also contends that the program does not belong in an academic high school; "the kids would be better off getting their GED or in a vocational setting," she said. In contrast, the students view the program as their last chance to survive high school. As one student explained in Spanish:

> *We know they don't want us. They don't want us to learn . . . . Here in this class we are learning. It's different, not like the classes before. Sometimes it's hard because we don't have just one book, we don't just copy, we have to think different and more. But now I see that we're together here, like family . . . . am me . . . . we share and sometimes we don't agree . . . . For the first time, I feel like I know something, that what I think matters . . . . Now I think maybe I can stick it out and get a diploma.* [Translation mine]

These administrators' and this student's words make real the tensions, conflicts, and possibilities that surround literacy development and instruction for adolescents and young adults in many public high schools, not just City High. They point to the difficulties in getting urban secondary schools to accept that (a) an increasing number of their incoming students may not speak English or be literate in any language and yet are intelligent human beings; (b) the present conditions of public schooling help place these students at further risk; and (c) the dominant understandings of and approaches to classroom organization, instructional content, pedagogy, and teacher/student and student/student relations need to be reexamined.

Critical Pedagogy, (Bi)literacy Development, and Student Engagement

The African-American feminist writer, bell hooks[2] (1989), maintains the following:

> Students also suffer, as many of us who teach do, from a crisis of meaning, unsure about what has value in life, unsure even about whether it is important to stay alive. They long for a context where their subjective needs can be integrated with study, where the primary focus is a broader spectrum of ideas and modes of inquiry, in short, a dialectical context where there is serious and rigorous critical exchange. (p. 51)

It was promoting this critical exchange and encouraging a connection between lived experience and academic learning that was to be the focus of my work with the advanced basic skills students. In fact, the teacher had already begun to craft this pedagogical orientation when she and the students invited me in the spring of 1990 to work with them on a classroom project that would address the theme, "a dropout comes back to school."

The students' initial desire was to develop a sociodrama—a dramatization of a plausible (but fictional) social situation—and record it on video. Because I had worked on such a project with some of the same students two years before, the students were familiar with and aware of the effectiveness of both the method and the medium. They saw sociodrama as a nonthreatening form that enabled them to depict and recount the struggles, conflicts, and meaningful issues of their lives without having to personally reveal themselves. Many students were also intrigued with having their images and words recorded on camera. While I respected their wishes, my interest was to move beyond what had already been done and to present us all with a new challenge. I was interested in encouraging the students to make a connection between oral communication and print, a difficult task since most had very limited literacy skills and had demonstrated a resistance to any school task that required writing. My intent was to help create a purposeful, meaningful, and collaborative context for literacy development in the classroom—one that would engage students in collectively constructing text, in discussing, analyzing, and critiquing the context and language (varieties, dimensions, linguistic and grammatical forms) that would go into the text, and in assuming the role and responsibility of authorship. I wanted the students to move from thinking of themselves as objects to being subjects (since in my mind this is a key aspect of the literacy process). I also wanted the students to begin to understand the complex, tenuous, and often contradictory relationships with and among language, literacy, schooling, and lived experience. This entailed encouraging students to talk, to theorize, and to write (in any and all languages and varieties) about the contexts, contents, and meanings of their lives in and out of school, and to critically explore both their subjective positions and the existing and often conflicting discourses within these contexts.

The visual medium that I had in mind to ground the process and afford a purposeful context was that of a photonovel, a comic-book-like format with photographs rather than caricatures. I talked with students about collectively constructing a sociodrama—a story about a student who dropped out of school and decided to come back—drawing pictures to represent initially the characters, actions, and contexts that went with the words, and then eventually staging photographs to provide the real-life images for the real-life dialogue. In this talk, my focus was on the creation of the story and its visual display rather than on the task of writing per se. After considerable discussion and questions, there was consensus.

The production of the photonovel occurred over the period of approximately three months, during which I spent one or two periods a week offering feedback and technical assistance. Students and teacher continued to work on the project during other periods. While there are numerous aspects of this process of students' engagement and of their emergent biliteracy that I could analyze and discuss, I will focus here on only three.

Theme dynamics and language and literacy status

The first aspect is that of the underlying significance of students' choice of the theme in terms of their own subjective positions. This is important because it reveals much about how students individually perceive themselves, their social relations, and their language, literacy, and academic status within the school and the classroom. It also suggests how some of these perceptions are constructed and illustrates how these perceptions can structure what goes on in the classroom in terms of interactions, engagement, language use, (bi)literacy learning, knowledge production, and instruction. The initial interest in "a dropout comes back to school" was stimulated by discussions students had had both among themselves and with the teacher about two peers who had left school and were considering returning. Both of these peers had actually "illegally" shown up in school on a couple of occasions, coming to this class because of the widely held respect among Latino at-risk students for this particular teacher. Their presence engendered both dialogue and speculation about why they had left, about the tensions inherent in pondering whether or not to return, and about the disparities between the worlds of school and community. Although they never came out and actually said it, many of the students alluded to their own prox-

imity to this reality. They had also been overtly reminded of this proximity by a letter the bilingual program administration wrote to the parents of these students earlier in the year stating that because of their low achievement they had been placed in advanced basic skill classes. The letter began: "Dear Parent of a Potential Dropout." It was handed as an open sheet of paper to each student in the class to bring home to their parents. All of the students were both angered and taken aback by this direct naming of their status. For the newly arrived students, many of whom had high aspirations for school and life success in the United States, the letter also produced confusion about their present circumstance and their future.

Because of different subjective experiences, the significance of the dropout theme varied from student to student. For example, a few of the students had critically explored the dropout theme in the production of the previously mentioned video; some also had been in the city or other U.S. schools for a number of years and were bilingual. As compared to the more recent arrivals, they demonstrated more of an awareness of the attitudes toward Latinos in general and the low-literate, at-risk Latinos in particular. They talked about feeling like they were being pushed out of school. And, because of their proficiency in English, they also understood the often derogatory comments of some Anglo teachers and the school administration. Their resistance to this oppressive reality was made evident in numerous ways (see Walsh, 1991a), as was the administration's attempts to break them. These students hovered alarmingly close to the school door; the ingrained belief that a diploma would lead to economic success (despite the fact that reading and writing abilities in either language were very limited) seemed to be the only motivation for staying. In contrast, the Spanish-dominant fairly recent arrivals tended to blame themselves and the conditions of their lives (e.g., limited formal schooling in the native country, frequent absenteeism due to job and family responsibilities) for their potential dropout status. They still had the hope of learning (a hope many of the others seemed to have lost), yet encountered teachers and curricula unwilling and unable to address appropriately the literacy development they required.

Chris Weedon (1987) maintains that the ways people make sense of their lives is a necessary starting point for understanding how power relations structure society. As she explains:

> How we live our lives as conscious thinking subjects, and how we give meaning to the material social relations under which we live and which structure our everyday lives, depends on the range and social power of existing discourses, our access to them, and the political strength of the interests which they represent. (p. 26)

Because of their subjective positions in the school, classroom, and community, students in the class had differential access to the discourses that surrounded and situated dropping out, being at risk, and limited in school-based literacy. Consequently, their understandings of themselves as well as their understandings of one another differed greatly. The more recently arrived Spanish-dominant students viewed those bilingual ones who had been in the system, accustomed to urban life, and overtly resistant, as *los tigres* (the tigers)—the street-wise, tough kids who provoked problems and would be better off out of school or, at the very least, out of their classroom. In contrast, the designated *tigres* perceived those newly arrived who had come from rural areas as *los jíbaros del campo*, the backward peasants from the countryside. They chastised and taunted the *jíbaros* (oftentimes in English) for their lack of formal schooling, their passivity, their dress, their regional varieties of Spanish, and their inability to employ the strategies of codeswitching that they considered as indicative of status and group identification. The other students in the class who fell somewhere in between these two designated groups aspired toward acceptance by the *tigres* and, as a result, also actively put down the *jíbaros*. While the literacy abilities of all were limited, the members of the more recently arrived group were also perceived as the *brutos*, the dumb ones who were non-English-speaking, illiterate, and less intelligent. It seems that the discourse used by the school administration to describe the entire class had been appropriated by some to position and exert power over the others.

What is particularly interesting is the role language and literacy assumed in these group dynamics. Bilingualism, that is, the ability to switch into English at will or to insert English words and phrases at opportune moments, helped define status. In fact, status within the group seemed to be proportionately associated with English ability. Thus, while Spanish was the dominant language of the entire group, those with the greater English ability, the most bilingual, clearly had higher status and more power within the classroom. They also considered themselves to be superior. Although the more recently arrived Spanish-speaking students complained about the bilinguals'

self-positioning, they frequently tried to emulate them. [Editor's note: See Hornberger, this volume, for another description of tensions regarding language use and ability in a Puerto Rican youth program in Philadelphia. Ramirez, also this volume, offers a description of the language attitudes of Hispanic adolescents enrolled in Texas and California schools.]

Biliteracy similarly assumed a significance within these power relations. Although the bilingual students displayed major difficulties in reading and writing in both languages, they contended that they could read and write; it was just that they did not want to. Because they had been in U.S. schools for a while and had learned some English, most could in fact write some English words. As with oral language, this ability served to position them differentially in relation to the more recent arrivals who could neither speak nor write English and who were more open about both their inabilities and their desire to learn.

The differential understandings of the material social relations and the subjective positionings in the classroom were further illuminated in the students' choice of a fellow student to play the main character for the photonovel. Numerous names were placed in nomination, but each student nominated refused to accept the part. Criteria were also discussed but none could be agreed upon. Finally, one of the rural, more recently arrived group put forth the name of Julian (a pseudonym), a fellow group member. Julian beamed with pride. At first, *los tigres* argued that there was no way he could assume the role because he lacked the finesse in dress, style, and identity that was required. But when no one else was willing to take the lead, they and their allies began to joke about letting Julian make a fool of himself; by their talk it became clear that none wanted to assume the dropout identity for fear of exposing (either to their peers or to themselves) their own proximity. However, there was still an uneasiness in permitting Julian to do so. One student's words (rendered in Spanish) serve as an example:

> *Let him play the jerk, what do we care. He's dumb enough that he doesn't know better. I don't want everybody to think that's me. You know I'd look good . . . . but that isn't me . . . . But nobody is going to believe the story with him in it either.* [Translation mine]

The significance underlying the theme and students' struggle over its meaning and physical depiction is illustrative in that it provides a window into the competing social realities and complex power relations that are too often ignored or glossed over in discussions of literacy, language, and pedagogy. Thus, while bilingualism and biliteracy may be our ultimate goal for the students with whom we work, we must be cognizant of the divergent and often conflicting meanings, interpretations, experiences, identities, and subjective positions that shape and situate students' linguistic, cultural, and social relationships, alliances, status, and groupings within schools, classrooms, and communities as well as the ways these environments impact language, literacy, and pedagogical possibilities.

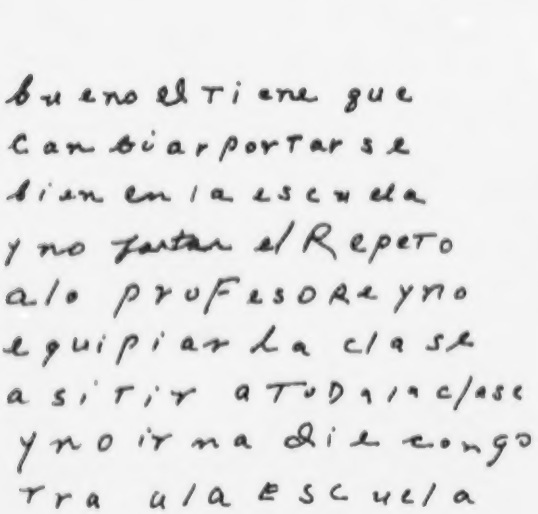
The tensions of lived experience and the power of collaboration

A second aspect of the photonovel process that I want to discuss is how, through theme-related dialogue and collaborative writing, students began to explore their understandings of the at-risk/dropout condition. As they began to uncover the power relations at work in the school and how they were differentially affected, the role and function of literacy began to take on new meaning.

The initial context of the photonovel dialogue that the students collectively developed and collaboratively wrote focused on the character of Julian—specifically, his decision to leave school, his economic and familial responsibilities, his search for employment, and the low wages and heavy physical labor that went with the job he found and that led to a reconsideration of his dropout decision.[5] (Since Spanish was the dominant language of the class, this dialogue was conducted primarily in Spanish.) It was in discussing how to document and portray Julian's thought about returning that the tone and substance of students' dialogue and discussion about Julian's lived reality shifted. As a group, the students began to explore critically the reasons Julian left school to begin with and what might have to change in terms of both him and the school if he were to return.

In students' brainstorming at the outset of the project, they identified two major reasons for Julian's leaving: the treatment inside school and the need for money. The issue of treatment led to discussions about and elaborations on Julian's inappropriate behavior, his

problems with teachers, and the suspensions and disciplinary actions that were the result.[1] There was consensus that Julian was individually at fault; mention of the school standards, policies, and practices that determine what is appropriate behavior and what is not was absent. Similarly, when we began to discuss Julian's possible return to school, most of the students argued that he would have to change. In their cooperative working teams, some began to write about what this change meant. Here are two examples:


bueno el tiene que
cambiar portarse
bien en la escuela
y no faltar el Repeto
alo profesore y no
equipiar la clase
asistir atoda la clase
y no ir na di le congo
tra ula escuela

(well he has to change behave good in the school and not be disrespectful to the teacher and not skip class attend all class and not to go nobody with hat to the school)

(I did this before but when I return to school I am not going to do it.)

As someone with no formal administrative, instructional, or student status in the school, I began to question students as to the rules they were required to follow, asking what these rules were, where they were documented, who had made them, how they were instituted and maintained, and who controlled them. These questions promoted a dialogue that went on for weeks and that led to students eventually studying the code of discipline, discussing why rules were necessary, which rules were fair and which were unfair, and actually rewriting it. However, before reading and working on the actual code, the students began to raise questions about the ways some students were treated as compared to others and to critically examine the differential ways the school rules were carried out. One working team decided to document their thoughts and discussion for possible use later:

NO TODAS LASLeLLes son jUSTAS LA de -
La school.
becose is De MaCIADO estrictas.
sifueran mas mo de rada los muchachos
no se pu si e ran de revelde.
con los maes tros y los prinsiPALes,
ni LOS CON seferos.
las lelles que ellos tienen SON mui fuerts
solo con los is pano.
Ricky piens A que si las lelles son
cun p lidas los muchachos Ispanos
las cumpliRAN. LLA que
quieren ponel Las Lelles A LOS
ispano SOLAMENTES
y LAR gunos gringo ((NO))

(Not all the school laws are just
because is overly strict.
if [they were] more moderate the students
wouldn't be rebellious.
with the teachers and the principals,
nor with the counselors.
the laws that they have are very strong
only with the Hispanics.

Ricky thinks that if the laws were
carried out [with everybody] the Hispanic kids
would fulfill them. It's that
they want to put the laws just to the Hispanics
and to the gringos <<NO>>)
[Translation mine]

There is much that could be analyzed in these students' composition. Certainly issues of syntax, morphology, semantics, and textual organization could be examined as could the students' strategies for word and syllable emphasis, their regional variety of spoken Spanish, their association of oral language and script, and their occasional use of English. Instead, I would like to focus briefly here on why this text is significant in terms of students' collaboration, their (bi)literacy development, knowledge production, and their understanding of the subjectivities, conflicting discourses, and power relations that surrounded them.

The student who actually wrote the text was one of the more recently arrived rural Dominican students. His (mutually chosen) team member who was Puerto Rican had spent more time in the United States and had more experience with the English language. However, as the only Puerto Rican actively involved in the project, his identity in the class was fragile. Both students had told me at the start of the project that they could not write. Indeed, their participation in the actual writing of the dialogue of the photonovel had, up until this time, been very limited. They also had not been particularly vocal about their own opinions with regard to school rules during dialogues in class. Both their production of this piece, its impassioned tone, and their explicit collaboration therefore surprised me.

The purpose of the text was, as these two students explained, *para recordar* (to remember) what they as well as a lot of the students in the class thought about the fact that Latinos were always being suspended. (Sixty-four percent of the bilingual program Latinos in this school were suspended the previous year.) They said that it might be of possible use at some later point in the project. For them, the text represented oral speech written down; capitalization offered a way to remember the emphasis they put on particular words when they said it aloud, and the intermix of English is as it was spoken.

Writing gave these students a voice; it came to afford a function that, at least in the context of something truly meaningful to them, the students had probably not had the opportunity to consider previously. Furthermore, it offered an outlet to express their awareness and understanding of and anger about the unequal power relations and conflicting discourses in the school and, in so doing, gave the photonovel more authentic and personal significance. It also helped explain and give meaning to some of their peers' disruptive and resistant behavior. When they read what they had written back to the entire class, the other students affirmed the two students' literary as well as subjective positions both by agreeing with what they had written and by reacting with further discussion and personal applications. In the next class, the students embarked on an active, emotional dialogue about if and how they could change the reality and conditions. They endeavored to tackle, in a sense, the fundamental poststructural question of "how and where knowledge is produced and by whom, and of what counts as knowledge" (Weedon, 1987, p. 7). It was at this point that they expressed a desire to read the code of discipline, examine the rules that they were most often suspended for, and possibly rework those that seemed inappropriate or irrelevant. They talked to me and to the teacher about if and how their suggestions could be given to the administration. They also conversed among themselves about whether the adults in the building should not also have to abide by the rules and discussed how student review boards might be a way to intervene before sending students to the vice principal. This process demonstrated alternative forms of knowledge production that led to a realization for many that the established discourses, meanings, relations, and conditions for Latinos in the school did not necessarily have to be taken for granted. Reading and writing became the tools that assisted them in their work and analysis. While they occasionally needed technical assistance from adults in the class, they had clearly determined the project and taken ownership. Its significance was recognized when, at the end of the school year, they presented the new code along with the photonovel to the superintendent, his assistant, and to one of the school vice-principals.

Although some of the students could have made the presentation in English, the group decided that it was their context to control; Spanish was the language of the meeting and non-Spanish-speaking

guests were required to communicate through the designated translator (the teacher). The administrators listened to the students give an overview of both the new code and the photonovel in Spanish, and to the teacher's translation. They asked numerous questions about students' opinions of their schooling and respectfully waited for the Spanish transmission and the translation into English of students' responses. This was the first time the students had had such control (linguistically, socially, and intellectually); it was also the first time these administrators had shown an intense interest in what these students were saying. The administrators voiced a commitment to consider the suggestions presented, and in September some were actually implemented.

Coming to authorship

The third aspect of the photonovel process that I briefly want to mention is the students' coming to and assumption of authorship. As I mentioned earlier, none of the students at the outset of the project enjoyed, felt competent in, or saw the purpose of writing. Reading was also perceived as a teacher-directed task that seemed alien in purpose and, because of their (actual and perceived) abilities, labor intensive and devoid of meaning. The context and content of the returning dropout theme, the medium of the photonovel, and the participatory and critical nature of the pedagogy seemed to afford a space, a reason, and a place (a) for students' perspectives, experiences, and understandings to emerge; (b) for further investigation and interrogation to occur; and (c) for this all to be documented so that others could read it and so that it would be remembered.[5] The teacher, who is a recognized adult biliteracy specialist, saw this assumption of the role of authors as tied to an increase in students' control over and understanding of the writing process. In contrast to the remedial, skills-type approaches these students had been exposed to in other classrooms, she viewed the photonovel methodology, particularly its use of visual images, as enabling students to become writers. As she explained:

> It helped students not just write words but use the skills of more critical analysis; the use of visual images provides a context that helps students detect where details are lacking in the story and to elaborate. It provides contextual cues that enable them to reflect, judge, and to assess their writing.

The students' collective assumption of the author role became particularly evident in the final stages of the project. As the end of the school year neared, there were three things that still had to be done before we could send the books to be printed: a clear display of the text (handprinted or typed), editing, and layout. The teacher and I discussed these needs and the short amount of time left with the students and asked them how they thought we should proceed and whether they wanted us to assume any or all of the responsibilities. They felt these tasks were theirs to do and requested that we only provide technical assistance. They divided themselves into three groups: the computer word-processing team (some of whose members had never before used computers), an editorial board, and a layout crew. The teacher was asked to provide technical help to the first team while I was asked to offer assistance to the latter two. We worked collectively for seven hours nonstop on two consecutive days to complete the project. Students who I had been told by others in the building had an attention span of about 15 minutes did not even want to break for a lunch period.

While both the teacher and I were pleased that the students themselves had taken control of the photonovel's completion, we were hesitant about letting them assume the editorial function. We wondered, as teachers often do, whether we should correct spelling and grammar. What would it mean (for us, for the student-authors, and for potential readers) if the text was not standard? After much deliberation, we shared this concern with the students. They reminded us the text was theirs, that they appreciated our concern, but that the decision, responsibility, and authority was with the editorial board they had designated. As adults and as educators, we had to let go; the students themselves had taken literacy, knowledge, and pedagogy and run with it.[6]

On the last day of school, we organized a book party for the students in the class and for their invited friends. (The above-mentioned administrators, the bilingual guidance counselor, and the bilingual director were also invited after the students were each formally presented with their copies.) The students, all dressed up for the occasion, gave speeches about what the project and the final publication of the book meant. Pride was evident in their bodily stance, in their words, tears, and in their friends' respect and admiration. While each testimony was equally poignant, I especially re-

call the whispered words to me of the lone Salvadoran student in the class whose engagement in the project was quiet but constant.

> *Soy autor. I am an author! You know, my family, they laughed when I told them I was writing a book. They said I was making it up. You know, I only went to the first and part of the second grade in El Salvador. Now I can show them that it is true, my name is here, soy autor. I even want to send a copy to my relatives back home, they'll be surprised . . . . they'll see, I'm an author, I still have a lot to learn but I've made it.* [Translation mine]

Conclusion

This chapter offers a glimpse into the dynamics, tensions, and possibilities that surround biliteracy development and knowledge production for linguistic minority adolescents and young adults in U.S. public schools. In contrast to many adult education contexts, these students are surrounded by the conceptions, orientations, and relations of an academic setting that has little or no use for lived experience, linguistic and cultural difference, or for students who do not measure up to the age-specific standards of literate and intellectual performance. Within this context, knowledge is wielded as distinct from and outside the realm of the real world and the community; instruction only serves to emphasize what students do not know. Literacy learning, if it occurs at all, is most often dependent upon individual will and/or a singular teacher's interest and dedication rather than on a focused program and pedagogy for action.

My discussion of the photonovel project and the students' construction of popular text affords one example of the learning and engagement that can occur when the traditional pedagogy and curriculum that place students with limited formal schooling at risk are challenged. It points to the need to build upon the experiences, concerns, and perspectives of students and to make these the base from which literacy learning and knowledge production can emerge. It also demonstrates the potential that a more critical pedagogy can offer in terms of repositioning marginalized students as knowers and as teachers, rethinking the content, context, and social character of classroom instruction, and encouraging critique, engagement, responsibility, community, and a questioning of the status quo.

Finally, the chapter helps make evident the complex significance of language and literacy, and the conditions, relationships, and practices that surround their use and development. In so doing, it demonstrates that bilingualism and biliteracy are more than just taught and learned communicative forms: They are dynamic, complicated, political relations. As a result of the contexts, intentionalities, and competing tensions that surround one's place within both the immediate and the broader social order, these relations are in a constant state of shift, conflict, growth, and change.

Notes

[1] I recently witnessed this in action in a classroom of what were referred to as "advanced basic skill" (i.e., limited-literacy, at-risk) students. A (white) school administrator had voluntarily assumed a mentor role with the group of mostly males because of their high-risk status in the building. While this involvement initially consisted of focused discussion, group counseling, and an effort to establish alliances based on his own non-English upbringing, it shifted at one point to what he thought the students should know, based on E.D. Hirsch's (1987) standards for "cultural literacy." The students' lack of knowledge and disinterest in the majority of items on Hirsch's list were met by the administrator with alarm and dismay. He could not understand how students had reached high school without this knowledge; certainly success in the United States required, at least from his perspective, that this knowledge be taught and learned, in the school if not at home, and its inherent values internalized.

[2] In accordance with this writer's practice in signing her own name, I have used initial lowercase letters.

[3] This development and writing were done in small working groups of two or three, thus encouraging students to talk about meaning and word use, and to alleviate the individual burden of syntactical and morphological form and composition. The products of these groups were then shared with the entire class. While suggestions and recommendations were elicited, the final decision on content and form was left up to the original authors.

[4] The purpose of this initial brainstorming was to encourage a dialogue about the conditions of Julian's (and their) life that could eventually lead to the development of a story. Because students

were wary about having to write, the first couple of weeks were spent with them talking and me informally recording their comments so that we would remember. The visual format that I used to do this recording on the blackboard was a problem-posing tree; at the base of the tree trunk were the two identified reasons for his leaving and below we identified the "roots"—the problems, concerns, issues, and situations that prompted his leaving. The branches of the tree became the problems, issues, and circumstances that were created because of the leaving. The tree strategy provided a visual, graphic, and contextual way to represent the class discussions that made sense even to those students who had difficulty reading the actual words the tree included. In some instances, to make the tree even more comprehensible, I made a small drawing to represent the thought and to accompany the word or words that I wrote.

[5] This documentation was done first in Spanish since this was the dominant language of most in the class (including the teacher). A small group of bilingual students worked on the English version at the same time, drawing from the Spanish text but adding their own understandings and interpretations.

[6] The students' decision to edit the photonovel reflected neither an unawareness about their own limited abilities nor of the role of importance of the standard, grammatically correct form. In the final composition of the new code of discipline, for instance, students requested that the teacher do the final editing. They knew that because it was to be given to administrators, it should be in the standard and appropriate form. The photonovel, in contrast, had a very different audience and purpose.

References

Bloom, A. (1987). *The closing of the American mind: How higher education has failed democracy and impoverished the souls of today's students*. New York: Simon and Schuster.

Cook-Gumperz, J. (1986). Literacy and schooling: An unchanging equation. In J. Cook-Gumperz (Ed.), *The social construction of literacy* (pp. 16-44). New York: Cambridge University Press.

Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56, 18-36.

Ferdman, B. (1990, May). Literacy and cultural identity. *Harvard Educational Review*, *60*, 181-204.

Fine, M. (1987, February). Silencing in public schools. *Language Arts*, *64*(2), 157-174.

Fueyo, J.M. (1988). Technical literacy vs. critical literacy in adult basic education. *Journal of Education*, *170*(1), 107-118.

Graff, H. (1987). *The legacies of literacy: Continuities and contradictions in western culture and society*. Bloomington: Indiana University Press.

Hirsch, E.D. (1987). *Cultural literacy: What every American needs to know*. Boston: Houghton Mifflin.

Hispanic Policy Development Project (HPDP). (1988). *Closing the gap for U.S. Hispanic youth*. Washington, DC: Author.

hooks, b. (1989). *Talking back: Thinking feminist, thinking black*. Boston: South End.

Moll, L. (1989). *Community knowledge and classroom practice: Combining resources for literacy instruction* (Year one progress report to Development Associates/U.S. Dept. of Education). Washington, DC: U.S. Department of Education.

Roth, R. (1984). Schooling, literacy acquisition, and cultural transmission. *Journal of Education*, *166*(3), 291-308.

Scribner, S. (1984). Literacy in three metaphors. *American Journal of Education*, *93*(1), 6-21.

Shannon, P. (1989). *Broken promises: Reading instruction in twentieth-century America*. South Hadley, MA: Bergin and Garvey.

Walsh, C.E. (1991a). *Pedagogy and the struggle for voice: Issues of language, power, and schooling for Puerto Ricans*. NY: Bergin and Garvey.

Walsh, C.E. (1991b). Literacy as praxis: A framework and introduction. In C.E. Walsh (Ed.), *Literacy as praxis: Culture, language, and pedagogy* (pp. 1-22). Norwood, NJ: Ablex.

Weedon, C. (1987). *Feminist practice and poststructuralist theory*. New York: Basil Blackwell.

Language in Education: Theory and Practice

The Educational Resources Information Center (ERIC), which is supported by the Office of Educational Research and Improvement of the U.S. Department of Education, is a nationwide system of information centers, each responsible for a given educational level or field of study. ERIC's basic objective is to make developments in educational research, instruction, and teacher training readily accessible to educators and members of related professions.

The ERIC Clearinghouse on Languages and Linguistics (ERIC/CLL), one of the specialized information centers in the ERIC system, is operated by the Center for Applied Linguistics (CAL) and is specifically responsible for the collection and dissemination of information on research in languages and linguistics and on the application of research to language teaching and learning.

In 1989, CAL was awarded a contract to expand the activities of ERIC/CLL through the establishment of an adjunct ERIC clearinghouse, the **National Clearinghouse for ESL Literacy Education (NCLE)**. NCLE's specific focus is literacy education for language minority adults and out-of-school youth.

ERIC/CLL and NCLE commission recognized authorities in languages, linguistics, adult literacy education, and English as a second language (ESL) to write about current issues in these fields. Monographs, intended for educators, researchers, and others interested in language education, are published under the series title, *Language in Education: Theory and Practice (LIE)*. The *LIE* series includes practical guides for teachers, state-of-the-art papers, research reviews, and collected reports.

For further information on the ERIC system, ERIC/CLL, or NCLE, contact either clearinghouse at the Center for Applied Linguistics, 1118 22nd Street, NW, Washington, DC 20037.

Vickie Lewelling, ERIC/CLL Publications Coordinator
Joy Kreeft Peyton, NCLE Publications Coordinator

Other *LIE* Titles Available from Delta Systems Co., Inc.

The following are other titles in the *Language in Education* series published by the Center for Applied Linguistics and Delta Systems Co., Inc.:

Making Meaning, Making Change: Participatory Curriculum Development for Adult ESL Literacy (ISBN 0-937354-79-1)
by Elsa Roberts Auerbach

Talking Shop: A Curriculum Sourcebook for Participatory Adult ESL (ISBN 0-937354-78-3)
by Andrea Nash, Ann Cason, Madeline Rhum, Loren McGrail, and Rosario Gomez-Sanford

Speaking of Language: An International Guide to Language Service Organizations (ISBN 0-937354-80-5)
edited by Paula Conru, Vickie Lewelling, and Whitney Stewart

Cooperative Learning: A Response to Linguistic and Cultural Diversity (ISBN 0-937354-81-3)
edited by Daniel D. Holt

Approaches to Adult ESL Literacy Instruction (ISBN 0-937354-82-1)
edited by JoAnn Crandall and Joy Kreeft Peyton

To order any of these titles, call Delta Systems, Co., Inc. at (800) 323-8270 or (815) 363-3582 (9-5 EST) or write them at 1400 Miller Pkwy., McHenry, IL 60050.

ADULT BILITERACY IN THE UNITED STATES
David Spener, Ed.

This collection of articles by fifteen leading researchers and teachers explores the social, cognitive, and pedagogical aspects of developing biliteracy— literacy in two languages. Chapters cover such themes as:

- linguistic diversity and the education of language minority adults
- how national population studies treat biliteracy
- the literacy practices of immigrant families
- sociolinguistic considerations in literacy planning
- ways of promoting biliteracy in classrooms, elementary school through adult

Researchers, teachers, and administrators working in K-12 and adult English as a second language (ESL) and bilingual education settings will find valuable insights and practical examples.

ISBN 0-937354-83-X

BEST COPY AVAILABLE